FOOD, NUTRITION AND DIETING

A Comprehensive Study of American Attitudes, Habits, Perceptions and Myths

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WHEAT
INDUSTRY
COUNCIL

WHY WE NEED TO KNOW WHAT AMERICANS ARE THINKING
ABOUT FOOD

As the American lifestyle changes, those of us in the food industry, who supply so much of what is basic to American life, must envolve as well. We have to continue to develop new products and upgrade existing ones in order to answer emerging needs. We need to alter or improve our marketing and education programs to fill gaps in consumer knowledge and awareness. And so that we might be able to do allthat effectively, we must know all we can about prevailing attitudes about food, diet and nutrition.

As part of the Wheat Industry Council's commitment to provide timely consumer information to our members and to the public as well, this study was undertaken to find out what consumers think of wheat-based foods, their attitudes about nutrition and how the American lifestyle has altered the use of certain products. The study would not have been possible without a generous grant from Universal foods and the co-operation of many industry related groups and individuals.

The results have provided some surprises. It also confirmed one of our more popular suspicions: Americans are increasingly concerned with nutrition, yet they have little understanding of the importance of wheat-based foods in a balanced diet.

The Wheat Industry Council intends to use the infomation gained in this study as a basis for future education programs to explode some of the myths about wheat products and promote consumer awareness of food and nutrition. We hope the findings will also be useful to others in our industry involved in product development, marketing and education.

Sincerely,

Raymond L. Davis

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October, 1983

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FOOD, NUTRITION AND DIETING

A Comprehensive Study of American Attitudes, Habits, Perceptions and Myths

EXECUTIVE SUMMARY

Introduction

Between 1972 and 1981, certain wheat-based products experienced declines in per capita consumption while others increased. This study establishes baseline measurements of consumer attitudes and opinions about where wheat-based foods stand today in the minds of actual and potential consumers.

This information provides millers, bakers and food manufacturers with information they can use in developing marketing, advertising and nutritional communication programs.

A national consumer mail panel sample which can be considered representative of most U.S. households was used.

Food Shopping Behavior and Interest in Food Labeling

More married men are becoming involved in grocery shopping because their wives are working. Today, 41% of all men are involved in shopping; 13% say they are totally responsible for the grocery decision all or part of the time.

The survey found 49% of all men highly involved in shopping -- married, single, divorced and widowed.

Consumers prefer grocery shopping Thursday through Saturday during the morning and afternoon. A significant number reported no particular preferences for either time or day. The single population is less likely to have an established shopping schedule.

Households where both adults work full-time are more likely to have an established shopping day (typically Thursday through Saturday) and are more likely to shop in the early evening.

The most common shopping patterns for both men and women are checking for date on dairy products, redeeming coupons, making shopping list at home and reading ads to check specials.

Just over three-fourths of shoppers said they buy regularly at a supermarket which has unit pricing and 58% make use of it.

Women involved in grocery shopping, particularly non-white women, are more likely to be interested in nutritional information than men. Households without children showed a somewhat greater interest in nutritional information than those with children.

Residents of major metropolitan areas show a greater concern in nutritional food information than consumers in rural areas.

Another relationship was found in age: interest in nutritional food label information increases along with age. Women are more likely than men to use the information.

The four most important items on food labels, consumers say, are sugar, calorie and sodium content and food additives and preservatives.

As income increases, interest in protein content, vitamins and fiber content decreases; in calorie levels it increases. Consumers with household incomes less than $10,000 show the least knowledge and familiarity with the various nutritional/ingredient terms while those with incomes of $30,000 or more claim the greatest familiarity and understanding.

Asked the meaning of the term "enriched bread", four out of five consumers correctly replied that the bread contains extra vitamins and minerals but many incorrectly said it included added protein, fiber and preservatives.

Most consumers reported that they paid more attention to dating on dairy products than on packaged bakery products or to unit pricing and nutritional or ingredient labeling information.

Only 7% of consumers have fresh pasta sections in their supermarkets.

How the Consumer Perceives Different Foods

The study measured consumer opinions of different wheat-based products and other foods such as fresh fruit, potatoes, eggs, milk, chicken and ground beef. The latter group gave a point of

reference to see how consumers position wheat products compared to everyday foods.

Wheat by itself is very popular and rated as very nutritious and scores highly as good for you and for roughage and fiber. It ranks with chicken, eggs, milk, ground beef and fruit as wholesome, natural and nutritious.

However, foods containing wheat are not described positively except for wheat and rye bread. White bread, English muffins, crackers, hamburger buns, pizza, spaghetti, macaroni, macaroni with cheese, macaroni salad, noodles and fresh pasta are seen as less wholesome and less natural than wheat itself or wheat or rye bread.

Obviously, adding other ingredients such as butter, sugar and salt and refined flour diminishes the perception of wheat.

Wheat bread is seen as having less starch, fewer calories and being less filling than white bread. White bread is considered as more suitable for children while wheat bread is preferred for adults.

White bread won in just two categories: freshness and part of a well-balanced diet.

White bread and hamburger buns are considered soft and spongy as well as bleached; English muffins, firmer in texture than white bread and more flavorful than white bread or hamburger buns but more expensive than most bread products.

Spaghetti and macaroni are very much alike in the minds of consumers. Both are associated mostly with high starch content, being filling and fattening and having low nutritional value.

They also are seen as a good value for the money and products children especially enjoy eating.

Egg noodles, however, are perceived as somewhat less fattening, less filling and somewhat nutritious but higher in cholesterol than the other two.

Packaged cookies, snack cakes and donuts generally are described as fattening, high in sugar, junk food and expensive. They also are seen as good tasting and liked especially by children. About their only nutritional value, according to their perceptions, are as a source of quick energy.

Consumers tend to associate snack foods with sugar, butter and other ingredients rather than wheat.

Additional Insight into Perception of Wheat-Based Food

Asked to indicate what they felt were the three major ingredients of each of nine wheat-based products, the vast majority showed

they were aware that flour is the primary ingredient of all of them.

Other than flour, consumers do not generally know the major ingredients. For example, the three major ingredients in a typical loaf of white bread are flour, water and corn syrup (sugar); all other ingredients are less than 2% each.

Yet nearly one out of three consumers mentioned preservatives and additives as one of the three major ingredients, one out of four mentioned salt and 15% cited vitamins and minerals.

While the major ingredients in white and wheat bread are seen as similar (flour, yeast and shortening), the latter overall is less apt to be seen as containing preservatives, salt, water and sugar and more likely to be given credit for vitamins, minerals and whey.

The major ingredients perceived in packaged donuts, snack cakes and cookies are flour, sugar and preservatives.

How consumers see the difference between wheat-based foods was shown when they were asked to indicate what each specific food provided to a person's diet. The responses:

White Bread - Starch, carbohydrates, salt, vegetables shortening, salt and vitamins.

Wheat Bread - Fiber, vitamins, starch, carbohydrates and salt.

Macaroni/Spaghetti - Starch, carbohydrates and salt.

Snack Cakes/Donuts - Sugar, starch, carbohydrates and empty calories.

Asked to tell the number of calories in specific products, few consumers knew. They guessed about twice the number of calories in a slide of bread that one contains and guessed fewer calories for a slice of wheat bread although the two are about the same.

Consumers gave natural foods the highest price/value ratings while the lowest ratings went to snack cakes and donuts.

Wheat bread is seen as having a better price/value than white, while white bread did better than English muffins.

Food Consumption

In looking at the products which had major positive shifts in purchases, only one wheat-based product, wheat bread, reflects increased consumption. Others either changed little or had significant decreases.

Consumers who are most concerned with nutrition were more likely to have cut back on bread (except for wheat bread), pasta, sweet goods, pizza, meat (except for ground beef) and non-diet soft drinks.

Those same consumers have increasingly used poultry, wheat bread, fish, fresh fruit and vegetables.

Families with children are more likely to serve spaghetti, macaroni and snack cakes.

Consumption of white bread is skewed heavily toward males across all age groups.

Also more likely to eat white bread regularly are consumers with a low degree of interest in nutrition and those with a low self-perception of nutritional knowledge.

Consumption of white bread falls off as a person progresses from youth to adulthood, leveling at about 30% of adults at around age 34.

As income rises, the incidence of adults who say they consume white bread decreases.

Spaghetti and macaroni are more likely to be consumed by adults from larger households. Unlike white bread, which levels off, consumption of spaghetti and macaroni continues to drop with age.

Snack cakes and donuts are predominately teen and pre-teen food products. Through 45 years of age, males are more likely than females to consume snack cakes. Consumption of donuts is greater for males through age 55. After those age points, consumption is similar.

Regionally, snack cakes are more likely to be consumed in the South.

With the exception of wheat bread, all bread products show a decline among users. Rolls show the greatest decline, while white bread, English muffins and bagels showed lesser decreases.

Most consumers serve bread or rolls with the main meal at least three times per week.

A white-bread prospect is a married female head-of-household, more likely to be under age 45, has a larger household with children under 18 and is less likely to live in the West.

A wheat-bread prospect also is likely to be a married female head-of-household but younger (age 35 or older), have a higher income and live in the North or West. She, too, lives in a larger household with children under 18.

Affecting overall sales of bread and roll consumption are the growth of away-from-home eating, changes in population composition and smaller families.

Asked to tell why they have avoided or reduced the amount of white bread they have been consuming, consumers gave the following reasons:

Taste - Preferred variety breads, gummy, more suitable for children, doesn't taste good by itself.

Nutrition - Little nutritional value, high in preservatives, junk food.

Health-Related - Fattening, high in starch, filling, high in salt, lacks fiber, no bulk.

Change in Eating Habits - Eat fewer sandwiches, don't eat foods requiring bread.

One factor contributing to the decline of wheat-based sweet good consumption is the frequency of serving desserts with the main meal. One out of three consumers practically never serves a dessert with the main meal.

The popularity of desserts is highest among those who are 65 and over.

The frequency of serving sweet desserts and snacks is typically greater in households of three or more, obviously reflecting the influence of children, who are heavy consumers of these products.

Reasons for Avoiding Wheat-Based Sweet Goods

A supplemental panel of consumers was asked additional questions on perceptions and usages of packaged ready-to-eat wheat-based sweet goods.

Consumers see these products as having little or no nutritional value, high in sugar and starch, fattening and containing empty calories. Preservatives are seen as a major ingredient.

As a result, many consumers report they serve more fresh vegetables and fruit as alternative snacks, especially those persons with a high concern for nutrition.

Behavior and Attitude Toward One's Well-Being

Asked to assess their level of concern with more than 30 different issues, consumers said their major concerns were making sure that foods they bought are fresh and taking care of their teeth. Concern with weight and eating too much sugar and salt are secondary areas of concern followed by eating a balanced diet, having time to relax and time to exercise.

On the other hand, few consumers indicated concerns with eating only natural foods, increasing carbohydrates in the diet or serving foods which take too long to cook.

Women consistently show a greater concern for nutrition, health and shopping consideration pertaining to food than men. They also are more likely to be concerned with having time to rest and exercise.

Predictably, a number of areas become more important to consumers as they progress from middle age to elderly: eating a balanced diet, having an adequate breakfast and three meals a day; eating too much starch, fat, meat, salt or coffee; getting enough fiber in diet and eating foods that keep you regular and sticking to a diet.

Younger respondents showed concerns about being able to relax, getting enough rest, making sure food they buy is fresh and drinking enough milk. These concerns diminish until middle age, when they increase as the respondent ages.

The majority of consumers are not on any specific diet.

Regionally, the reported level of Americans on a weight-loss diet is highest in the East and lowest in the West. Three times more teenage girls are likely to be on a weight-loss diet as teenage boys.

Nearly six out of ten adults claim they try to eat a balanced diet but don't make a big deal of it. About one in ten adults is concerned about eating what's beneficial.

When adults were asked how informed they felt they and their children were about nutrition, the vast majority felt they were at least fairly well-informed; only 14% felt they were not.

Lower-income adults are more likely to describe themselves as not informed while upper-income adults are more likely to describe themselves as very well-informed.

Women are more likely than men to claim they are very well-informed about nutrition.

Consumers were asked to pick from a list of 18 activities those which they performed at least seven times during the previous fourteen days. Most prevalent were snacking between meals, snacking before going to bed, exercising and taking vitamins. All other activities were undertaken by less than half of those surveyed.

Women are more likely than men to count calories and use a low-calorie product. Working women are more likely than men to carry a lunch to work and more likely than non-working women to skip breakfast.

Non-white women are more likely to skip meals than white women and let their families eat when they want.

Although the majority of Americans report exercising at least once a week, the incidence of adults who exercise for an hour or more each time is 24%.

Adults who exercise daily usually have spouses who also do.

While consumers indicated a lack of familiarity with various guidelines, more than half said they were very or somewhat familiar with those from the American Cancer Society, American Heart Association, Weight Watchers and Department of Agricultur and U.S. Surgeon General.

Evidence of the main meal breaking down is quite visible, especially in families with children where both adults work.

They study found that 20% of the consumers surveyed now eat breakfast away from home at least once a week and 29% of married adults with children eat dinner out at least once a week. Both are traditional at-home meals.

The incidence of away-from-home eating is greater among singles and lowest among the elderly.

Among both men and women who work, four in ten adults carry a lunch to work at least four or more times per week.

Attitudinal Segmentation

Based on their reactions to statements describing personal attitudes toward nutrition, eating habits, health, etc., consumers can be placed into one of four categories: three mealers (40%), overweight snackers (22%), the health/weight-concerned (25%) and unconcerned food lovers (13%).

Three mealers believe more strongly in eating a balanced, nutritious diet and three meals a day; limiting the intake of salt, sugar, starch, animal fat and cholesterol and have an above-average concern about getting enough exercise. They are very poor prospects for pizzerias and hamburger restaurants but among the best customers for wheat bread, rye bread and 2% or skim milk.

They are older, less likely to have children under 18 and have an above-average median income.

Overweight snackers snacks most frequently and likes rich desserts, rejects the notion of eating three meals a day and often skips breakfast, overate at least seven times in the past fourteen days, prefers white bread, are less concerned with eating a balanced diet than they used to be, prefers easy-to-fix foods, patronizes hamburger restaurants and tends to be permissive about their children's eating habits.

They have an average annual household income, are somewhat younger than all respondents, have children under age 18 and larger households. More than half say they are overweight.

The Health/Weight-Concerned are relatively young, fit and trim. They tend to limit the intake of any food, particularly snacks and desserts, exercise more regularly, eat nutritiously but skip breakfast and lunch with above-average frequency. Children tend to eat everything served at the meal and to take vitamins daily. Wheat bread and cheese are popular and cholesterol bothers them less than it does three mealers.

They are much younger than average and tend to have upper incomes and children under 18.

Unconcerned Food Lovers don't worry about what is good or bad nutrition. To many of them, packaged cookies or snack cakes have a place in a balanced diet and they worry least about the intake of starch, sugar, salt or cholesterol. White bread, packaged cookies, desserts and candy are accepted foods for their children

and they are more likely to eat white bread, spaghetti and macaroni than any other segment. A relatively small portion report frequent overeating and they are less likely to be seriously overweight (more than 10 pounds) than any other segment.

They have by far the lowest annual household income, represent the youngest segment and a very large proportion are in households with children under 18.

FOOD, NUTRITION AND DIETING

A Comprehensive Study of American Attitudes, Habits, Perceptions and Myths

Why The Study?

Between 1972 and 1981, certain food products experienced declines in per capita consumption while others increased. This study establishes baseline measurements of consumer attitudes and opinions about specific foods, nutritional attitudes and diet behavior. This information provides millers, bakers and food manufacturers with information to be used for developing marketing, advertising and nutritional communication programs. The study addresses:

- Awareness and knowledge of wheat as an ingredient in products.
- Perceptions/attitudes toward wheat and such specific wheat products as white bread, wheat bread, rye bread, hamburger and hot dog rolls, English muffins, packaged donuts, packaged snack cakes and other wheat-based products.
- Perceptions/attitudes toward such non-wheat foods as eggs, fruit, poultry, etc.
- Changes in the ways various foods are used.

- Attitudes toward nutrition, including awareness and knowledge of dietary guidelines, interest in nutrition, usage and avoidance of types of foods, concern with specific foods or ingredients, and interest in nutrition labeling.

- Diet behavior and physical fitness.

- Relevant demographics.

STUDY DESIGN AND SAMPLE

Full details on how the study was designed and conducted are in Appendix A. The following is an overview.

The Sample

The study was conducted via self-administered questionnaires mailed to a national sample of households. The sample can be considered representative of most U.S. households.

Of 4,692 questionnaires delivered, 3,477 or 74% were returned, a good response for a relatively complex and lengthy questionnaire.

The Questionnaire

The questionnaire was designed by Riter Marketing Research and Market Facts in conjunction with 200 different companies and groups representing the Wheat Industry Council, the U.S. Department of Agriculture, Universal Food Corporation, National Pasta Association and the Independent Bakers Association. There was extensive pretesting. A copy of the questionnaire is included in Appendix C.

Interpretation of Data

The report was written by Riter Marketing Research in conjunction with Market Facts.

Consumer Segments

There are different methods for grouping consumers into special segments for analysis. We have used a number of approaches. Our report focuses on the following segments: demographic, shopping involvement, the nutritionally concerned and by frequency of product use.

SECTION I

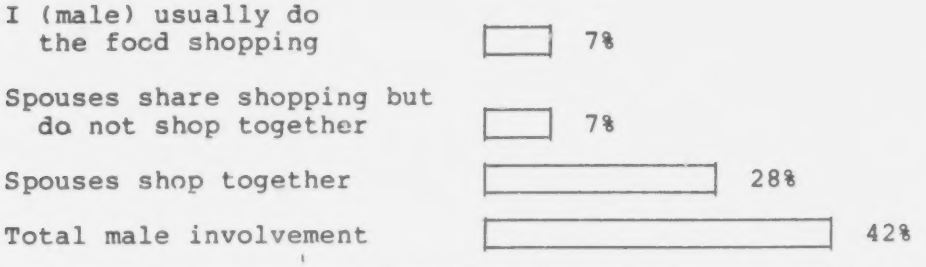
FOOD SHOPPING BEHAVIOR AND INTEREST IN FOOD LABELING

This portion of the report explores many aspects of food shopping from involvement of men in grocery shopping, preplanning, the shopping experience, the use of information provided at the point of purchase (unit pricing, nutritional and ingredient labeling, dating), to exposure and use of in-store bakeries and fresh pasta departments.

Husbands Involved In Grocery Shopping

With the growth of married women in the work force and the reported increase of married men involved in grocery shopping, consumers in the survey were asked to describe the involvement of their spouses in food shopping. Their responses show that the role and involvement of married men in food shopping is quite significant (42%). The level of male involvement varies from total responsibility for grocery decision all or part of the time (14%), to going along and shopping with his wife (28%).

Involvement Of Men In Grocery Shopping
In Married Household



Q. 10 - Which of the statements below best describes how food shopping is done in your household?

For purposes of analysis, consumers in the survey have been classified by their respective involvement in shopping. Group I represents consumers with high involvement and Group II, those with low involvement. The latter group represents consumers who indicated they did not participate in the shopping.

Of the men surveyed, 49% were classified as in the high involvement segment. This group consists of married, single, divorced and widowed men. Of the women surveyed, 95% are in this group.

Preferred Shopping Hours and Days

Consumers prefer grocery shopping Thursday through Saturday during the morning and afternoon. Evening hours and Sunday through Wednesday are the least preferred. A significant number of consumers have no particular preferences for either time or

day. Analyzing hours by key subgroups shows the following differences:

- The single population is less likely to have an established shopping schedule: just over four out of ten shop on no particular day.
- Households where both adults work full-time are more likely to have an established shopping day, typically Thursday through Saturday, and are more likely to shop in the early evening.
- Working women are more likely to shop on Saturday and during weekday evening hours than non-working women.
- Of consumers who shop on weekends, particularly Saturday, most are likely to visit before 2:00 p.m.

Time Of Day Main Grocery Shopping Is Usually Done

Base	Total (3366)	Working Female Involved In Shopping: Total Work (778)	Day Shop: Mon. (22)	Tue. (26)	Wed. (58)	Thu. (104)	Fri. (116)	Sat. (174)	Sun. (30)	Varies (240)	Non-Working Female Involved In Shopping: Total Non-Work (1488)	Day Shop: Mon. (47)	Tue. (77)	Wed. (117)	Thu. (255)	Fri. (270)	Sat. (167)	Sun. (21)	Varies (515)
8:00 - 10:00 a.m.	10%	8%	22%	11%	6%	5%	8%	19%	10%	1%	11%	22%	13%	19%	14%	11%	15%	8%	5%
10:00 - 12:00 noon	19	13	31	11	15	7	10	27	24	4	24	43	43	31	26	27	28	29	15
12:00 noon - 2:00 p.m.	10	7	7	7	2	13	4	13	18	2	11	6	15	12	18	10	14	22	5
2:00 p.m. - 4:00 p.m.	12	10	16	3	8	7	16	16	25	4	14	9	14	13	16	18	18	8	9
4:00 p.m. - 6:00 p.m.	13	21	7	31	32	31	25	10	6	21	8	4	6	7	7	13	5	20	8
6:00 p.m. - 8:00 p.m.	12	19	8	26	28	30	29	7	6	19	7	7	4	8	7	12	6	9	5
After 8:00 p.m.	2	2	--	7	6	6	2	*	--	2	1	--	2	2	1	2	3	--	1
Varies, no particular hr.	22	18	8	3	5	2	5	7	12	45	23	6	3	8	10	6	12	5	50

Q. 7 - On which day of the week is most of your weekly grocery shopping done?

Q. 8 - At what time of the day is your main grocery shopping usually done?

Time Of Day Main Grocery Shopping Is Usually Done

		Working Male Involved In Shopping									Non-Working Male Involved In Shopping							
		Total	Day Shop								Total	Day Shop						
Base	Total (3366)	Work (307)	Mon. (20)	Tue. (16)	Wed. (17)	Thu. (31)	Fri. (34)	Sat. (41)	Sun. (15)	Varies (130)	Non-Work (197)	Mon. (4)	Tue. (11)	Wed. (17)	Thu. (34)	Fri. (19)	Sat. (20)	Sun. (4)	Varies (85)
8:00 - 10:00 a.m.	10%	6%	4%	5%	--	6%	3%	21%	17%	1%	6%	--	7%	5%	10%	4%	8%	--	2%
10:00 - 12:00 noon	19	10	19	11	11	12	21	22	13	2	18	--	15	25	34	17	27	--	11
12:00 noon - 2:00 p.m.	10	8	10	27	--	3	5	20	25	2	9	18	8	5	5	15	18	52	6
2:00 p.m. - 4:00 p.m.	12	7	9	--	16	--	5	21	20	4	15	42	15	30	22	28	21	--	4
4:00 p.m. - 6:00 p.m.	13	17	9	7	21	24	22	9	7	19	12	39	23	15	5	18	21	48	6
6:00 p.m. - 8:00 p.m.	12	23	35	40	35	46	29	--	--	21	11	--	32	5	13	9	4	--	13
After 8:00 p.m.	2	6	14	--	6	--	6	--	--	10	4	--	--	--	3	5	--	--	7
Varies, no particular hr.	22	22	--	11	5	9	9	9	17	41	24	--	--	15	7	4	--	--	50

Q. 7 - On which day of the week is most of your weekly grocery shopping done?

Q. 8 - At what time of the day is your main grocery shopping usually done?

Shopping Behavior Last Major Grocery Trip

When shopping at the supermarket, consumers overall are more concerned with price and freshness of dairy products than with the nutritional value. The most common shopping patterns are to:

- Look for date on dairy products (83%)
- Redeem coupons (81%)
- Make shopping list at home (77%)
- Read ads to check specials (74%)

Analyzing men and women who are heavily involved in grocery shopping shows that overall, men are fairly similar to women in terms of how they shop. One area where men differ is that men are less likely to have read supermarket ads for specials and to redeem coupons the last time they went grocery shopping.

Some observations concerning the consumers' last shopping trip:

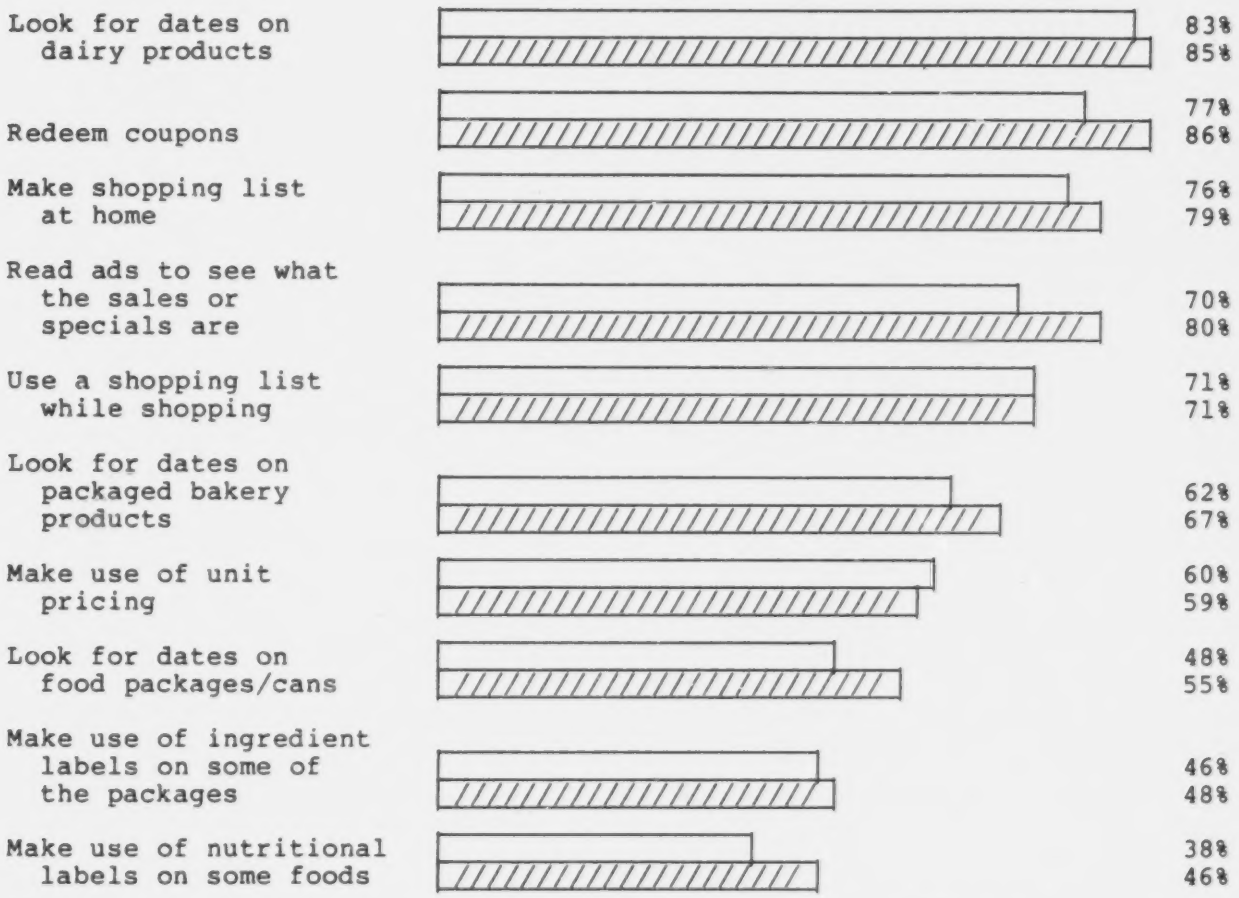
- The effects of time or one's schedule impacts on shopping habits. Older consumers, who presumably have more free time, are more likely to read ads, make shopping lists, spend time in the store checking dates on dairy, canned and bakery products.

In contrast, younger shoppers, those with larger families and, in particular, those where both adults work are less inclined to shop with lists or to take time to check dates. This suggests that while lists and checking dates are important, the pressures of time, family and work overpower shopping behaviors involving or requiring some home preparation.

While consumers in the South and West are just as likely to make and use a shopping list, redeeming coupons and checking newspapers for specials is more evident in the East and North.

Differences between white and non-white women involved in shopping show non-whites are less likely to take a shopping list and redeem coupons.

Behavior Last Time Shopped
By Sex Of Respondent Involved In Shopping



Q. 11 - The last time you did your major shopping, did you ...?

Key: Men

Women

Behavior Last Time Shopped
By Marital Status And Sex

Base	Total (3368)	Single (223)	Sep/Wid/ Div (644)	Married			Race Women	
				Total (2490)	Spouse Employed (443)	Both Employed (1213)	White (2006)	Non-White (404)
Look for dates on dairy products	83%	82%	83%	82%	82%	80%	85%	86%
Redeem coupons	81	72	80	83	88	79	86	78
Make shopping list at home	77	71	79	77	79	76	80	76
Read ads to check sales/specials	74	60	79	74	84	68	80	78
Use a shopping list while shopping	71	64	68	72	73	72	72	66
Look for dates on packaged bakery products	64	57	68	64	67	61	67	69
Make use of unit pricing	58	53	56	59	59	56	59	59
Look for dates on food packages/cans	52	54	54	51	53	47	55	57
Make use of some ingredient labels	46	46	49	45	49	42	49	41
Make use of nutritional labels on some foods	43	39	46	42	45	37	46	48

Q. 11 - The last time you did your major shopping, did you ...?

Behavior Last Time Shopped
By Income, Geographic Region and Population Density

		Income					Geographic Region				Pop. Density		
	Total	Under $10M	$10M-$15M	$15M-$20M	$20M-$30M	$30M Or More	East	North	South	West	Cent. City	Urban	Ru
Base:	3368	853	545	466	752	752	701	937	1145	585	1087	1282	9
Look for dates on dairy products	83%	81%	83%	84%	82%	83%	84%	79%	84%	83%	85%	82%	8
Redeem coupons	81	81	81	84	80	82	88	84	80	73	82	81	8
Make shopping list at home	77	78	76	80	75	77	76	77	76	79	77	76	7
Read ads to check sales/specials	74	77	77	75	70	72	78	80	72	65	74	72	7
Use a shopping list while shopping	71	68	69	73	70	74	72	71	69	74	70	70	7
Look for dates on packaged bakery products	64	64	67	66	63	62	71	62	66	54	64	64	6
Make use of unit pricing	58	54	60	56	61	61	59	56	59	59	60	58	5
Look for dates on food packages/cans	52	54	57	52	50	49	53	51	56	46	53	51	5
Make use of some ingredient labels	46	42	44	45	46	51	49	44	44	49	47	46	4
Make use of nutritional labels on some foods	43	40	45	41	42	45	45	40	41	47	44	42	4

Q. 11 - The last time you did your major shopping, did you ...?

When asked about availability of unit pricing and asked how often they used it, just over three-fourths (76%) of shoppers said they buy regularly at a supermarket which has unit pricing.

Regionally, unit pricing is more evident in the East (88%) than in other regions. Consumers who are in the middle and upper incomes are more likely to shop in stores where unit pricing is available than lower-income consumers.

Proportion Who Report
Store Where Shop Has Unit Pricing

	Available
Total Sample	76%
Income	
Less than $10,000	73
$10,000 - $14,999	74
$15,000 - $19,999	75
$20,000 - $29,999	79
$30,000 or more	80
Region	
East	88
North	72
South	74
West	74
Race	
White	75
Non-White	82

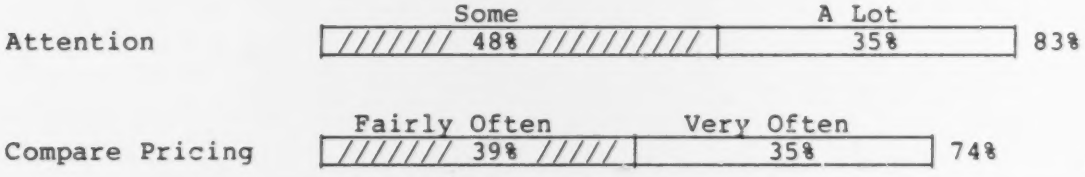
Q. 12A - Does the store where you do most of your major food shopping have unit pricing?

When we examine unit pricing among consumers who are regularly exposed to it, we find that unit pricing is being used. Specifically:

- o 83% pay attention to unit pricing.
- o 74% often compare different brands based on unit pricing.

Attention To Use Of Unit Pricing

Base: Consumers who shop in store where available.



Q. 12b - When you shop in a store which has unit pricing, do you tend to pay a lot of attention, some attention, or pay no real attention to the unit pricing information?

Q. 12c - How often do you use unit pricing to compare the prices of different brands?

A high degree of interest in nutrition has a direct effect on shopping behavior. Shoppers concerned with nutrition information clearly made use of nutritional, ingredient, and other label information the last time they shopped. In contrast, the low nutritional concern group behaves consistently with their attitudes. They paid virtually no attention to nutritional information the last time they shopped.

Behavior Last Time Shopped
By Interest In Nutritional Information

Base:	Total Sample (3366)	Concern About Nutritional Information: High (673)	Medium (1886)	Low (772)
Behavior last time shopped				
Look for dates on dairy products	83%	90%	84%	72%
Redeem coupons	81	84	83	76
Make shopping list at home	77	82	78	70
Read ads to see what the sales or specials are	74	78	76	67
Use a shopping list while shopping	71	74	72	67
Look for dates on packaged bakery products	64	75	66	52
Make use of unit pricing	58	75	61	38
Look for dates on food packages/cans	52	73	52	34
Make use of ingredient labels on some of the packages	46	74	47	18
Make use of nutritional labels on some foods	43	81	43	8

Q. 11 - The last time you did your major shopping, did you ...?

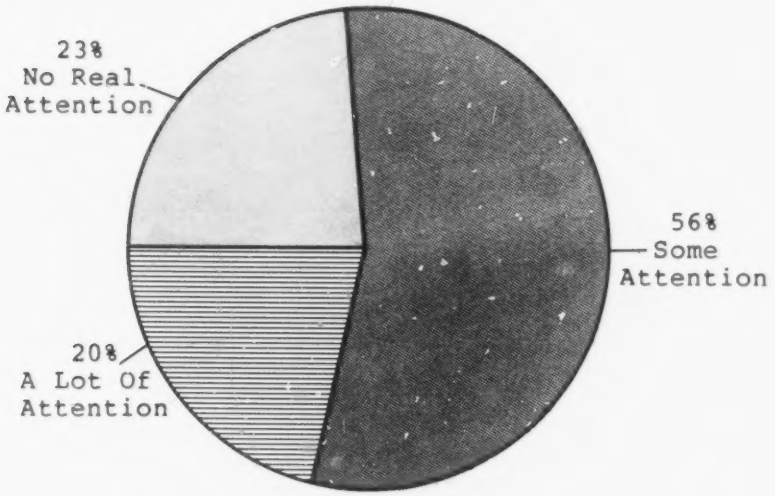
The following explores in greater depth the use of label information to make purchasing decisions.

Interest In Nutritional Food Information

Consumers were asked to indicate how much attention they pay to nutritional food labels and to what degree they use the information to make decisions about the products they purchase.

Most consumers (56%) say they pay some attention to nutritional information on labels. One's level of interest in nutritional information on food labels has a direct effect on food product purchasing behavior. A small segment (20%) pays a lot of attention to the nutritional information on food labels and makes frequent use of the information. Those who showed some (56%) or no interest (23%) basically neither compare brands nor put back products based on nutritional food information on labels.

Attention To Nutritional Food Labeling



Frequency Of Putting Back Products
Based On Nutritional Information

		Concern For Nutritional Information		
	Total	High	Medium	Low
Base	(3366)	(673)	(1886)	(772)
Very Often	6%	26%	2%	1%
Fairly Often	25	56	24	1
Seldom/Practically Never	68	19	73	98

Q. 18 -- About how often do you put back a package on the shelf because you found out from the label that it didn't contain as much nutritional value as you were looking for? Is it very often, fairly often, very seldom, or practically never?

Frequency Of Comparing Brands
For Nutritional Information

		Concern For Nutritional Information		
	Total	High	Medium	Low
Base	(3366)	(673)	(1886)	(772)
Very Often	12%	44%	4%	1%
Fairly Often	28	47	32	1
Seldom/Practically Never	60	8	63	98

Q. 19 - And, how often do you bother to compare the nutritional value of two or more different brands?

Analyzing various demographic segments reveals the following:

- Women involved in grocery shopping are more likely to pay attention and use nutritional information than men involved in grocery shopping.

- Among women, interest in nutritional information relates directly to one's involvement in food shopping.

- Interest in nutritional information relates to race; non-whites show greater interest in nutritional information than white women.

- The presence of children under 18 years of age in a household apparently has no major effect on attention to nutritional food label information. In fact, households without children showed a somewhat greater interest in nutritional information than households with children. Similarly, as household size increases, interest drops slightly.

- Interest in nutritional label information is slightly greater among residents of the West than those living in other regions.

- Interest in nutritional food information is directly related to city size. Residents of major metropolitan areas show a greater concern than consumers in rural areas.

- Interest in nutritional information relates directly to age: as one ages, interest in nutritional food label information increases.

- Those who say they are "careful" about what they eat are more apt to be concerned with nutritional information than consumers who report they are just trying to eat a balanced diet, watching calories or, as one would expect, don't worry about what they eat.

- Overall, interest and concern for nutrition does not relate directly to one's diet status in terms of weight control.

- Concern for nutrition relates to how well-informed consumers perceive themselves to be on the subject.

Total Sample	20%
Sex Of Respondent Involved In Shopping	
Women	23%
Men	14%
Sex Of Respondent Not Involved In Shopping	
Women	13%
Men	13%
Age Of Respondent	
Under 25	15%
25 to 34	19%
35 to 44	20%
45 to 54	20%
55 to 64	23%
65 and over	25%
Presence Of Children	
Children In Household	18%
No Children	22%
Size Of Household	
One	21%
Two	21%
Three to Four	19%
Five and over	19%
Race (Women)	
White	22%
Non-White	26%
Annual Household Income	
Under $10,000	19%
$10,000 to $14,999	20%
$15,000 to $19,999	17%
$20,000 to $29,999	21%
$30,000 and over	22%
Geographic Region	
East	20%
North	19%
South	19%
West	23%
Population Density	
Central City	22%
Urban	20%
Rural	17%
Diet Status	
Not Careful	9%
Only Calories	21%
Try To Balance	18%
Careful	41%

Q. 17 - Do you find that you pay a lot of attention, some attention, or no real attention to the nutritional labeling on foods?

Relationship Between
Concern For Nutrition And
Various Self Perceptions About One's Health/Weight

Attitude/Belief About One's Self	Total	Concern For Nutritional Information High	Medium	Low
Feel well informed about nutrition	23%	46%	21%	10%
In excellent health	21	27	20	19
Weight status				
Trying to gain more than 10 pounds	2	2	2	2
Trying to gain 1 to 10 pounds	2	4	2	2
Satisfied, don't worry	19	16	19	23
Satisfied, count calories	9	12	8	7
Trying to lose 1 to 10 pounds	29	28	29	28
Trying to lose more than 10 pounds	37	36	38	35
Diet concern				
Eat what I like	15	7	12	28
Concern is calories	14	15	15	11
Try to balance, don't worry	56	50	59	52
Eats only what's beneficial	11	23	10	5

Q. 45 - Would you say this person is well informed about nutrition in general, fairly well informed, or not that well informed?

Q. 48 - Which one of the statements below best describes this person's health?

Q. 49 - Which one of the statements below best describes this person's weight status?

Q. 50 - Which one of these statements best describes this person's concern about his/her diet?

Ingredient Labeling On Food

The level of consumer attention and the use of ingredient label information is higher than the attention and use of nutritional label information.

Comparison of Use/Attention
Nutritional and Ingredient Label Information

Base: Total Sample (3366)

Attention

	Some	A Lot	
Nutritional Labeling	56%	20%	76%
Ingredient Information	57%	28%	85

Comparison of Brands

	Fairly Often	Very Often	
Based On Nutritional Information	28%	12%	40%
Based On Ingredient Information	36%	18%	54%

Q. 17 - Do you find that you pay a lot of attention, some attention, or no real attention to the nutritional labeling on foods?

Q. 19 - And, how often do you bother to compare the nutritional value of two or more different brands?

Q. 21 - How much attention do you pay to ingredient labeling on foods?

Q. 22 - And, how often do you bother to compare the ingredients of two or more different brands?

Looking at the various segments, similar patterns of use and interest for nutritional and ingredient labeling emerge.

Specifically:

- o There is a corollary between interest in nutrition and ingredients. Those with high interest in nutritional information make use of ingredienc labeling information. Conversely, those who have little interest in nutritional information essentially do not use label ingredient information.

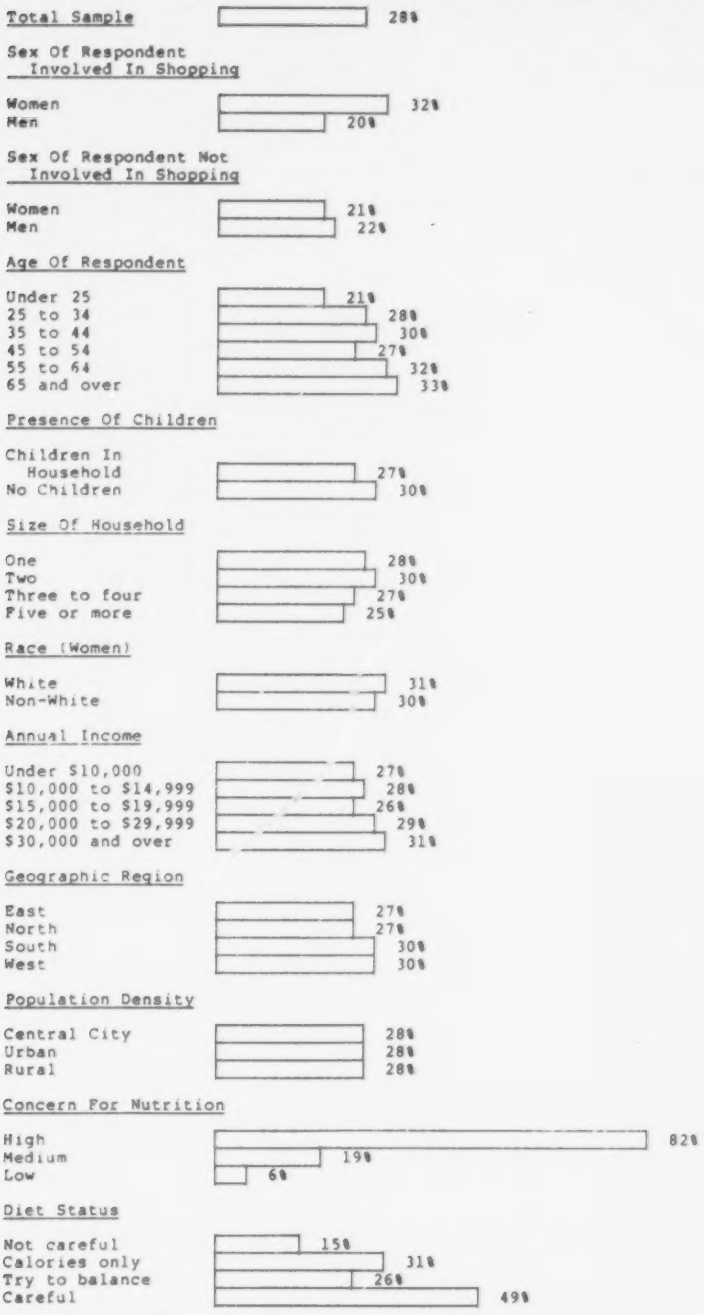
- o Women involved in shopping are more likely to use ingredient label information than men who food shop.

- o Interest in ingredients relates to income. Consumers with higher incomes are more concerned with ingredients than those consumers in lower income classifications.

- o As was true with concern for nutrition, consumer interest in ingredients decreases in larger families.

- o Concern for ingredients varies by one's diet status. Consumers who are concerned with eating properly pay more attention to both ingredient and nutritional labeling. Consumers who are concerned with watching calories are more concerned with ingredient labeling; however, as noted earlier, their interest in nutritional label information is average.

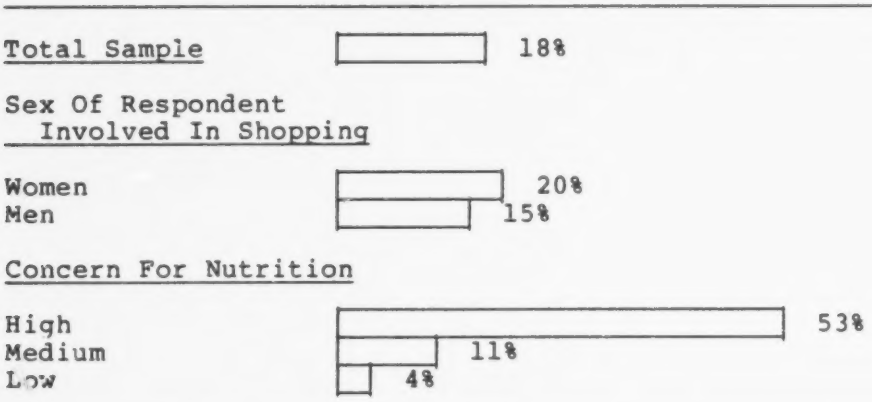
Proportion Of Sample Who Pay A Lot
Of Attention To Ingredient Labeling



Q. 21 - How much attention do you pay to ingredient labeling on foods?

Just as those who are concerned with nutrition frequently compare brands for nutritional information, they also compare ingredients.

Proportion Of Sample Who Often
Compare Different Brands
For Ingredient Information



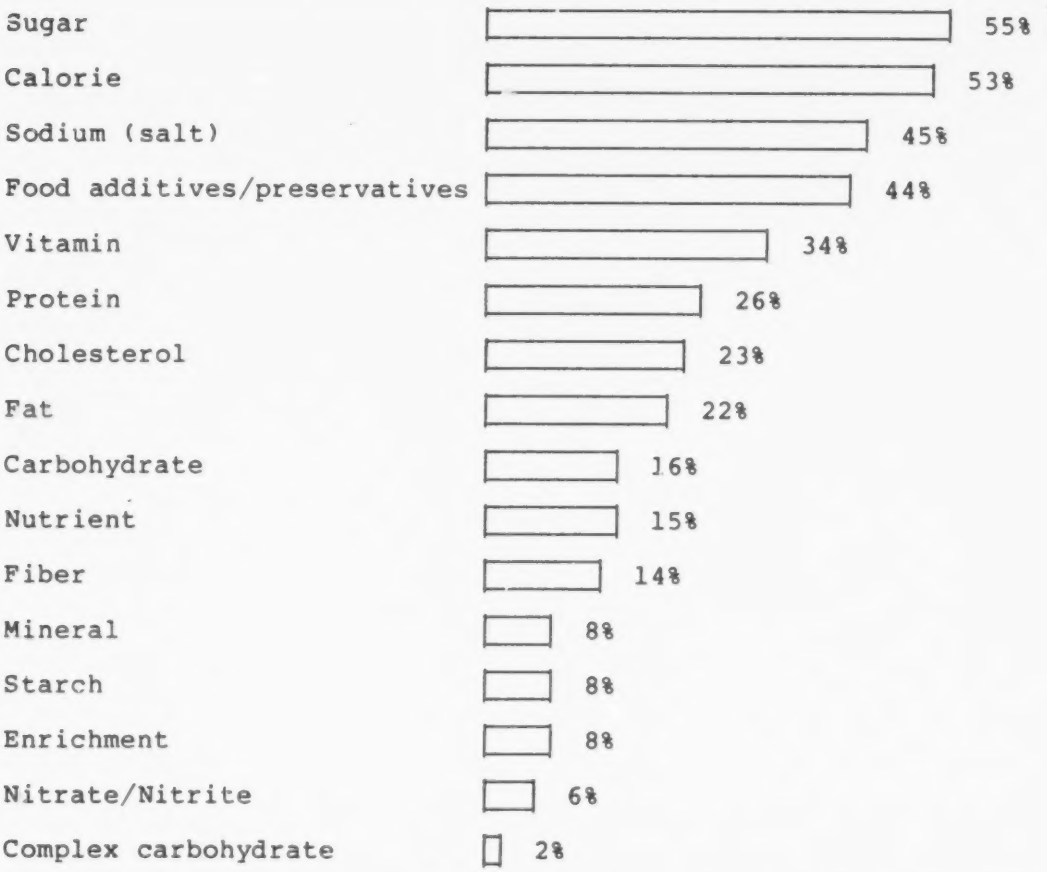
Q. 22 - And, how often do you bother to compare the ingredients of two or more different brands?

What's Important to List on a Food Label

Consumers in the survey were asked to indicate the two or three items they felt were essential to print on food labels. The four most frequently mentioned items were sugar content (55%), calorie content (53%), sodium (salt) content (45%) and food additives/ preservatives (44%). Few consumers (less than 20%) were interested in mineral content, carbohydrates, starch content, fiber, complex carbohydrates or nitrate content.

What's Most Important On Food Label

Base: Total Sample (3366)



Q. 20 - Which two or three items from the following list are most important to you to have included on a food label?

Analysis of various segments reveals that on the whole, those who have a higher concern for nutritional information are essentially in agreement, based on ranking, with what information they feel should be included on food labels. Differences reflect a higher interest in specific items. Some of these differences are:

- Those who have little interest in nutritional information show significantly less interest in additives, sugar and protein.

- Interest in protein, vitamins, fiber content and calories relates to income. As income increases, interest in protein content, vitamins and fiber content decreases and interest in calorie levels increases.

- Population density where one resides has no major effect on what consumers want on a food label.

- Responses vary by geographic area. No clear pattern of differences among areas suggest any meaningful rationale for observed differences.

- There are a number of direct relationships between age and the importance of specific information on food labels. Interest in cholesterol gradually increases with age becoming very important to consumers over age 65. Similarly, interest with fat and sodium increases with age. Conversely, interest in vitamins and calories decreases in importance among the elderly.

What Is Important On Food Label

	Total	Concern With Nutrition		
		High	Medium	Low
Sugar content	55	63	56	47
Calorie content	53	50	54	53
Sodium (salt) content	45	51	45	40
Food additives/preservatives	44	51	46	36
Vitamin content	34	33	36	33
Protein content	26	32	28	19
Cholesterol content	23	26	23	19
Fat content	22	28	22	19
Carbohydrate content	16	21	16	13
Nutrient content	15	22	15	10
Fiber content	14	16	14	12
Mineral content	8	14	7	6
Starch content	8	10	9	6
Enrichment	8	12	8	4
Nitrate/Nitrite content	6	13	6	2
Complex carbohydrate content	2	4	1	1

Q. 20 - Which two or three items from the following list are most important to you to have included on a food label?

Most Important To Include On Food Label

	Total Sample	Child Under 18	No Children Under 18	Under 25	25-34	35-44	45-54	55-64	65 & Over
Sugar content	55%	57%	54%	50%	58%	57%	52%	58%	53%
Calorie content	53	52	52	56	53	58	57	49	43
Sodium content	45	38	51	34	37	41	51	56	55
Food additives/ preservatives	44	47	42	44	51	44	43	39	41
Vitamin content	34	39	29	47	41	31	25	20	33
Protein content	26	26	27	29	25	23	20	26	34
Cholesterol content	23	17	28	16	14	22	25	27	39
Fat content	22	17	28	14	15	19	25	31	35
Carbohydrate content	16	16	16	15	16	18	14	17	17
Nutrient content	15	15	14	21	16	13	11	12	16
Fiber content	14	11	16	12	10	12	12	17	23
Mineral content	8	8	8	10	8	6	6	8	10
Starch content	8	7	9	7	5	6	8	10	14
Enrichment	8	7	8	8	6	5	7	8	14
Nitrate/nitrite content	6	5	8	3	4	7	6	10	11
Complex carbohydrate content	2	1	2	2	1	1	1	3	3

Q. 20 - Which two or three items from the following list are most important to you to have included on a food label?

Most Important To Include On A Food Label

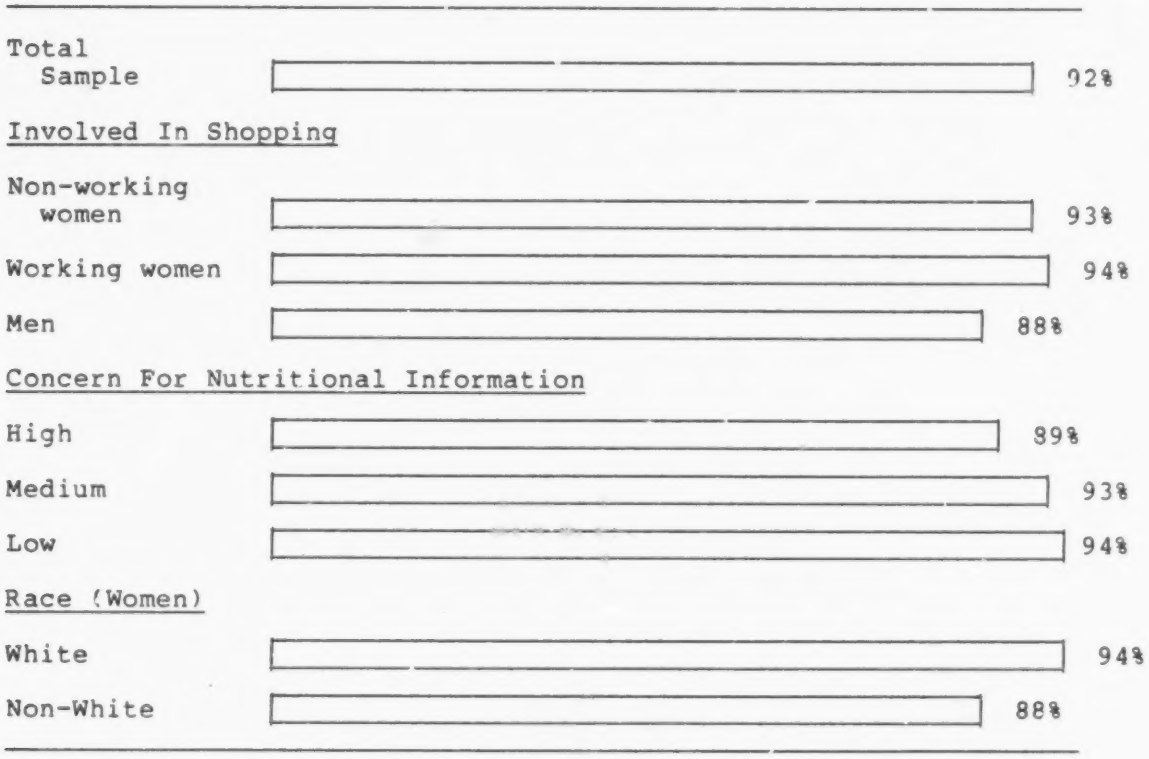
Base:	Total (3366)	Income: Under $10M (853)	$10M-$15M (545)	$15M-$20M (466)	$20M-$30M (752)	$30M Or More (750)	Geographic Region: East (701)	North (936)	South (1145)	West (584)	Pop. Density: Cent. City (1087)	Urban (1282)	Rura (998
Sugar content	55%	52%	53%	56%	57%	55%	55%	55%	53%	58%	54%	55%	56%
Calorie content	53	47	52	53	56	56	52	57	52	46	54	52	51
Sodium (salt) content	45	42	44	47	45	47	49	44	43	43	43	47	44
Food additives/preservatives	44	44	41	42	48	44	46	45	42	46	45	43	44
Vitamin content	34	40	40	34	32	25	33	32	38	30	35	33	34
Protein content	26	33	31	26	23	21	24	24	29	29	28	26	26
Cholesterol content	23	24	23	22	22	22	21	24	22	23	22	24	22
Fat content	22	24	20	22	20	24	20	20	24	25	24	22	21
Carbohydrate content	16	18	14	17	15	16	16	15	18	14	18	15	16
Nutrient content	15	17	18	15	14	13	16	15	15	16	16	15	14
Fiber content	14	18	16	13	11	12	12	14	14	17	14	15	12
Mineral content	8	11	11	7	6	6	7	8	9	9	8	7	9
Starch content	8	12	10	7	6	6	8	8	9	8	8	8	8
Enrichment	8	12	8	7	7	5	8	9	7	7	7	8	8
Nitrate/Nitrite content	6	7	5	5	6	8	8	6	5	8	7	7	6
Complex carbohydrate content	2	2	2	1	2	1	3	2	1	1	2	2	1

Q. 20 - Which two or three items from the following list are most important to you to have included on a food label?

Preference For Generic Or Technical Terms

A strong majority of consumers (92%) feels that manufacturers should use common names when listing ingredients on labels. All consumer segments of the population feel this way.

Prefer Common Names on Labels



Q. 23 - Shown below are two ingredient labels for the same product. Version Code Q uses the technical terms; the other version, Code Z, uses the common or generic terms. Would you prefer the manufacturers to identify ingredients using technical or common names for food ingredients?

Why Interest In Common Ingredient Names

While the study did not ask consumers why they preferred common or technical names to identify ingredients, the answer may be in their knowledge or familiarity with the common names vs. the technical terms. (Additionally, our focus group sessions suggest that people are afraid of such unknowns as the chemicals in foods which many of the technical names imply.)

The words vitamin and caffeine have the highest level of familiarity and meaning. In contrast, many consumers are not very familiar with or perceive themselves unable to understand such nutritional or ingredient terms as nutrient density, trace minerals, empty calories, complex carbohydrates, amino acids, whey and nitrates.

Familiarity With Nutritional And Ingredient Terms

Base: Total Sample (3366)	% Very Familiar With Term/Meaning	% Not Familiar With Term/Meaning
Word		
Vitamins	79	1
Caffeine	78	1
Starch	66	1
Vegetable Shortening	65	2
Animal Fat	60	2
Meat Protein	58	3
Carbohydrates	55	3
Fiber	54	3
Minerals	53	3
Enriched Flour	53	2
Empty Calories	36	25
Vegetable Protein	35	10
Soy Protein	25	17
Nitrates/Nitrites	23	16
Amino Acids	22	20
Whey	21	19
Trace Minerals	19	30
Complex Carbohydrates	18	24
Nutrient Density	7	44

Table excludes no answer and respondents who claimed some familiarity with meaning.

Q. 15 - For each term please indicate how familiar you are with the term and its meaning.

Results, viewed by consumers' interest in nutritional information, show that those consumers who have a medium concern for nutritional information, the largest consumer group, have limited familiarity with the various nutritional and ingredient terms.

Proportion Who Are Very Familiar With Meaning Of
Nutritional And Ingredient Terms
By Interest In Nutritional Information

Base:	Total (3368)	Concern About Nutritional Information: High (673)	Medium (1886)	Low (773)
Word				
Vitamins	79	87	81	68
Caffeine	78	86	80	68
Starch	66	79	68	52
Vegetable Shortening	65	78	67	51
Animal Fat	60	77	61	44
Meat Protein	58	75	59	41
Carbohydrates	55	73	56	38
Fiber	54	74	55	36
Minerals	53	71	53	36
Enriched Flour	53	71	54	38
Empty Calories	36	60	35	20
Vegetable Protein	35	58	34	20
Soy Protein	25	47	22	13
Nitrates/Nitrites	23	41	21	13
Amino Acids	22	39	19	13
Whey	21	35	19	13
Trace Minerals	19	35	16	11
Complex Carbohydrates	18	36	16	9
Nutrient Density	7	17	6	4

Q. 15 - For each of the terms listed below, please "X" one box (going across) to indicate how familiar you are with the term and its meaning.

Here again, when results of the various questions are analyzed by the various segments of interest, what emerges is:

- Awareness and familiarity with the meaning of nutrition and ingredients relates directly to the concern with nutritional labeling.

- Men highly involved in grocery shopping do not show greater familiarity with the various nutritional/ingredient terms than men not involved with grocery shopping.

- Awareness and familiarity relates to household income. Consumers with income under $10,000 show the least knowledge and familiarity with terms, whereas those with incomes of $30,000 or more claim the greatest familiarity and understanding.

- With some exceptions (e.g., fiber, carbohydrates, empty calories and enriched flour) both men and women involved in shopping have a similar understanding of nutritional terms.

Familiarity With Nutritional And Ingredient Terms By Sex And Involvement In Shopping

Base:	Total Sample (3366)	Shopping Involvement: High Total (2801)	High Women (2275)	High Men (526)	Low Total (546)	Low Women (122)	Low Men (427)
Vitamins	79	80	80	76	74	80	73
Caffeine	78	79	80	76	74	78	73
Starch	66	68	69	62	60	64	59
Vegetable Shortening	65	67	68	60	58	71	53
Animal Fat	60	61	61	58	57	65	55
Meat Protein	58	58	59	55	55	60	54
Carbohydrates	55	56	58	49	49	53	48
Fiber	54	55	57	49	49	50	49
Minerals	53	53	53	52	51	50	51
Enriched Flour	53	55	57	45	45	56	41
Empty Calories	36	37	39	30	32	37	31
Vegetable Protein	35	36	36	34	33	34	32
Soy Protein	25	25	25	27	26	24	26
Nitrates/Nitrites	23	23	22	26	22	19	23
Amino Acids	22	22	21	24	20	19	21
Whey	21	21	21	20	19	19	19
Trace Minerals	19	19	18	22	18	18	19
Complex Carbohydrates	18	18	18	20	16	17	16
Nutrient Density	7	8	8	7	7	6	7

Q. 15 - For each of the terms listed below, please "X" one box (going across) to indicate how familiar you are with the term and its meaning.

Note that the term "enriched flour," which confronts most consumers when they purchase flour or white bread, is not widely understood.

When consumers were asked what the term "enriched bread" means on bread labels, most (82%) indicated that the bread contains extra vitamins and minerals. However, it also conveys a diversity of other additives to the bread, most of which are perceived

positively although incorrectly. This shows the confusion and misconceptions surrounding many of the words used on food packaging.

Percent Very Familiar With Term And Meaning
By Household Income Level

		Income				
Base	Total (3366)	Under $10M (853)	$10M-$15M (545)	$15M-$20M (466)	$20M-$30M (752)	$30M Or More (750)
Vitamins	79%	75%	77%	82%	80%	80%
Caffeine	78	75	77	78	81	80
Starch	66	62	63	65	68	72
Vegetable shortening	65	62	63	67	66	68
Animal fat	60	53	58	61	62	67
Meat protein	58	50	57	56	60	65
Carbohydrates	55	50	51	54	57	62
Fiber	54	48	50	54	57	62
Minerals	53	46	48	56	53	60
Enriched flour	53	54	56	50	51	55
Empty calories	36	29	32	33	42	45
Vegetable protein	35	32	32	34	37	41
Soy protein	25	21	22	25	28	29
Nitrates/nitrites	23	18	20	21	23	31
Amino acids	22	18	18	22	22	28
Whey	21	20	20	20	19	25
Trace minerals	19	13	16	19	21	25
Complex carbohydrates	18	15	15	17	20	22
Nutrient density	7	7	6	7	8	8

Q. 15 - For each of the terms listed below, indicate how familiar you are with its meaning.

What Consumers Perceive "Enriched" Means To White Bread
By Interest In Nutritional Information

Base:	Total Sample (3366)	Concern For Nutritional Information		
		High (673)	Medium (1886)	Low (772)
Correct				
Added vitamins/minerals	82	86	83	77
Better for you	43	43	43	43
Incorrect				
Added calories	12	13	11	11
Added sugar	9	12	9	9
Added fiber	29	29	30	30
Added preservatives	26	28	26	27
Added protein	41	37	42	44
Better tasting	22	22	22	23
Don't know	9	6	8	14

Multiple responses

Q. 33 - On many bread labels, the term "Enriched Bread" is used. Please "X" all the statements below which, in your opinion, describe what "Enriched" means to bread.

Description Of What "Enriched" Means To Bread

		Income					Geographic Region				Pop. Density		
Base:	Total (3366)	Under $10M (853)	$10M-$15M (545)	$15M-$20M (466)	$20M-$30M (752)	$30M Or More (752)	East (701)	North (937)	South (1145)	West (585)	Cent. City (1087)	Urban (1282)	Rur (9
Correct													
Added vitamins and minerals	82%	74%	81%	82%	86%	88%	82%	84%	78%	86%	82%	82%	8
Better for you	43	44	42	43	45	40	42	45	41	44	44	41	4
Incorrect													
Added calories	12	16	16	10	8	8	11	12	13	9	13	11	1
Added sugar	9	10	13	9	8	7	9	9	11	8	9	10	
Added fiber	29	33	36	32	27	22	28	30	31	27	31	30	2
Added preservatives/ additives	26	31	31	25	24	21	24	28	29	21	26	25	2
Added protein	41	44	49	39	39	36	44	43	41	34	42	41	4
Better tasting	22	28	25	21	19	17	21	23	25	15	25	20	2
Don't know	9	13	9	11	8	7	9	8	12	7	10	9	

Multiple responses.

Q. 33 - On many bread labels, the term "Enriched Bread" is used. Please "X" all the statements below which, in your opinion, describe what "Enriched" means to bread.

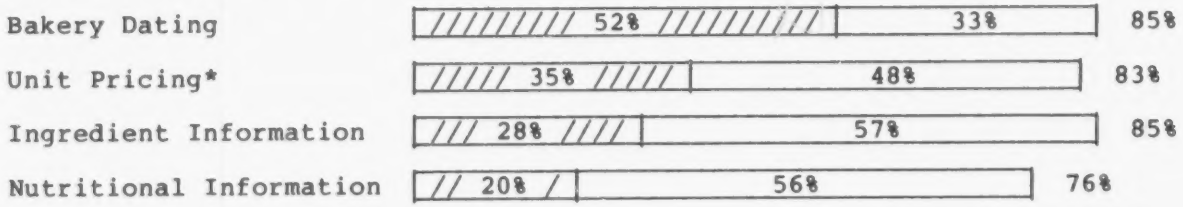
Dating Of Bakery Products

Most consumers reported that the last time they did major grocery shopping, they paid more attention to dating on dairy products than on packaged bakery products (83% vs. 58%). To provide additional insight into this area, shoppers were asked the following:

- Frequency of checking dating on bakery products.
- Attention to dating on white bread in particular.
- Comparison of dates on packages.
- Frequency of putting back products because it was out-of-date.

Most consumers (85%) say, in general, they pay attention to the dating on bakery products. In fact, consumers claim to pay more attention to bakery dating information than to nutritional or ingredient labeling information.

Percent Who Pay Attention



*Based on those exposed to unit pricing.

Key: A lot of attention

Some attention

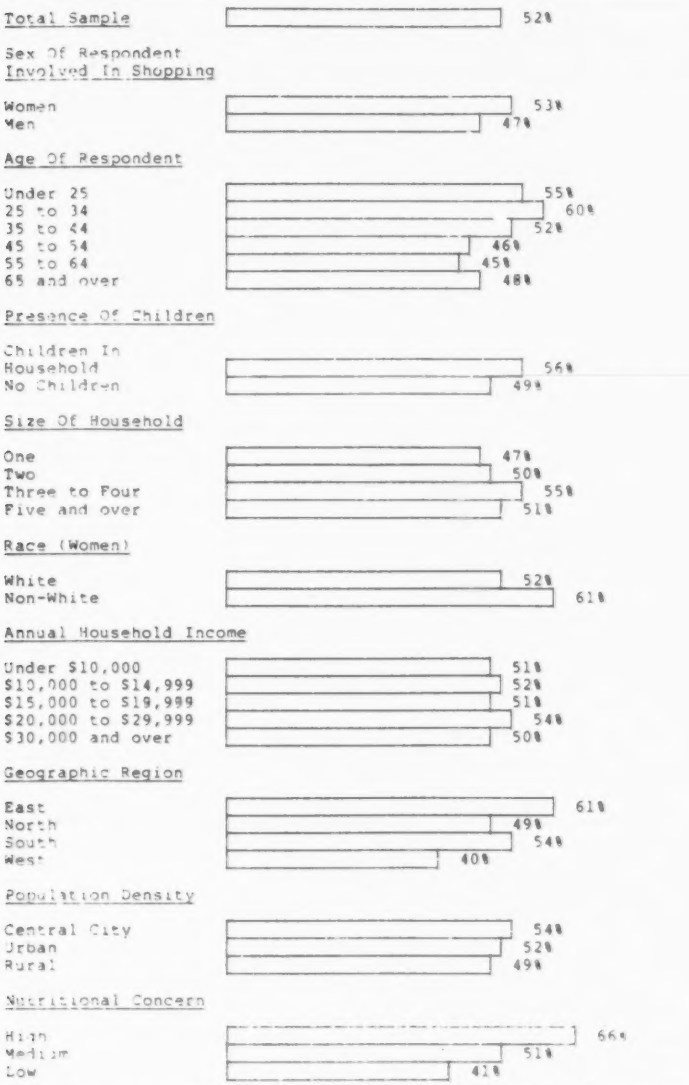
Analysis of responses to this issue by the various demographic and nutritional concern segments suggests the following:

- Consistent with other shopping patterns pertaining to nutrition, ingredients and the use of information, men are less likely to use bakery dating information.

- Those with a high interest in nutrition are more likely to pay attention to dating than those with no interest. The relationship is not as strong between nutrition and ingredients.

- Variations exist between demographic groups. Attention to dating is highest in the East and lowest in the West. Non-white women are more likely to pay attention to bakery dating than white women.

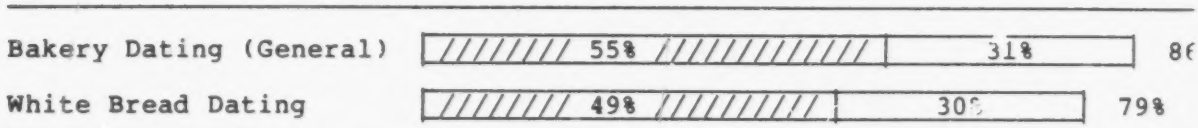
Proportion Who Pay A Lot Of Attention To Bakery Dating



Q. 41 - How much attention do you pay to the dating on bakery products?

When attention is directed to white bread, consumers who purchase and serve it frequently or occasionally pay slightly less attention to dating information than they do to dating on other bakery products.

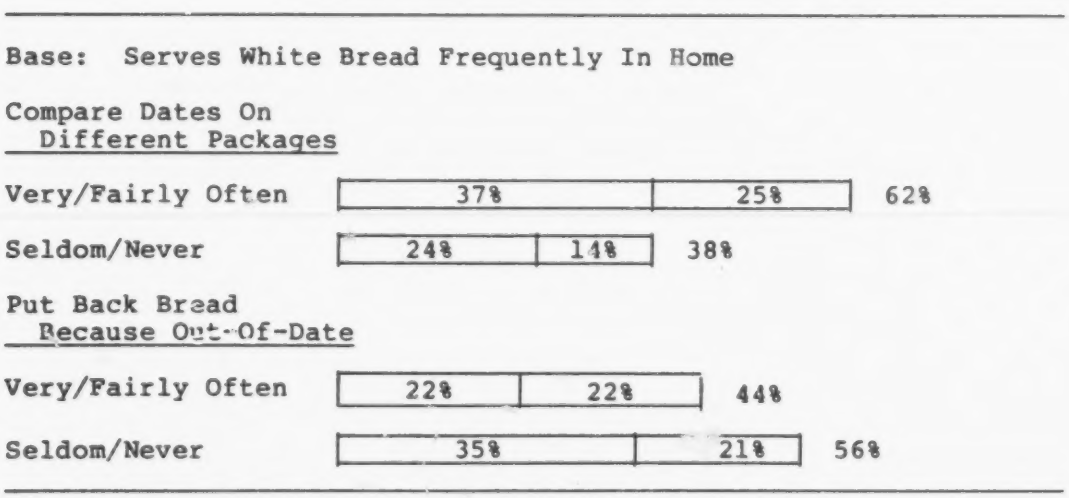
Percent Who Pay Attention To Dating
Among Those Who Frequently Use White Bread



Key: A lot
Some

The importance of dating information is even more evident among consumers who purchase white bread frequently. These consumers use dating for (a) comparing loaves of bread and (b) to a lesser degree, identifying out-of-date bread.

Consumer Behavior Among Those Who
Frequently Use White Bread



Special Sections Of The Supermarket

This section explores the impact of the in-store bakery and fresh pasta sections in many supermarkets.

In-Store Bakery

Consumers were asked to indicate their exposure and use of the supermarket in-store bakery. For purposes of clarity, the in-store bakery was defined as the section of the store where fresh bread, rolls and other bakery items are baked daily.

The results indicate that the availability of in-store bakeries varies by region and city size. Consumers in the North and East are more likely to have an in-store bakery where they shop than consumers in the South and West. Likewise, consumers in rural areas are less likely to have an in-store bakery than residents of the suburbs and inner city.

Availability Of In-Store Bakery

		Geographic Region				Population Density		
	Total	East	North	South	West	Central City	Urban	Rural
Base	(3366)	(701)	(936)	(1145)	(584)	(1086)	(1281)	(998)
Yes	67%	70%	74%	64%	61%	70%	69%	63%

Q. 28a - Does the store in which you do most of your grocery shopping have an in-store bakery section -- that is, a section which has fresh bread, rolls and other bakery items which are baked daily right in the store?

Frequency Of Purchase Of Baked Goods From In-Store Bakery

A total of 59% of grocery shoppers reported purchasing fresh baked products once a month or more from the supermarket in-store bakery; 22% of those surveyed reported they purchase baked goods from the in-store bakery section every week.

While the in-store bakery is shopped regularly by the majority of consumers doing major shopping, few consumers frequently make special trips to the grocery store to purchase either bread, rolls or other fresh baked goods from the in-store bakery.

Make Special Trip To In-Store Bakery

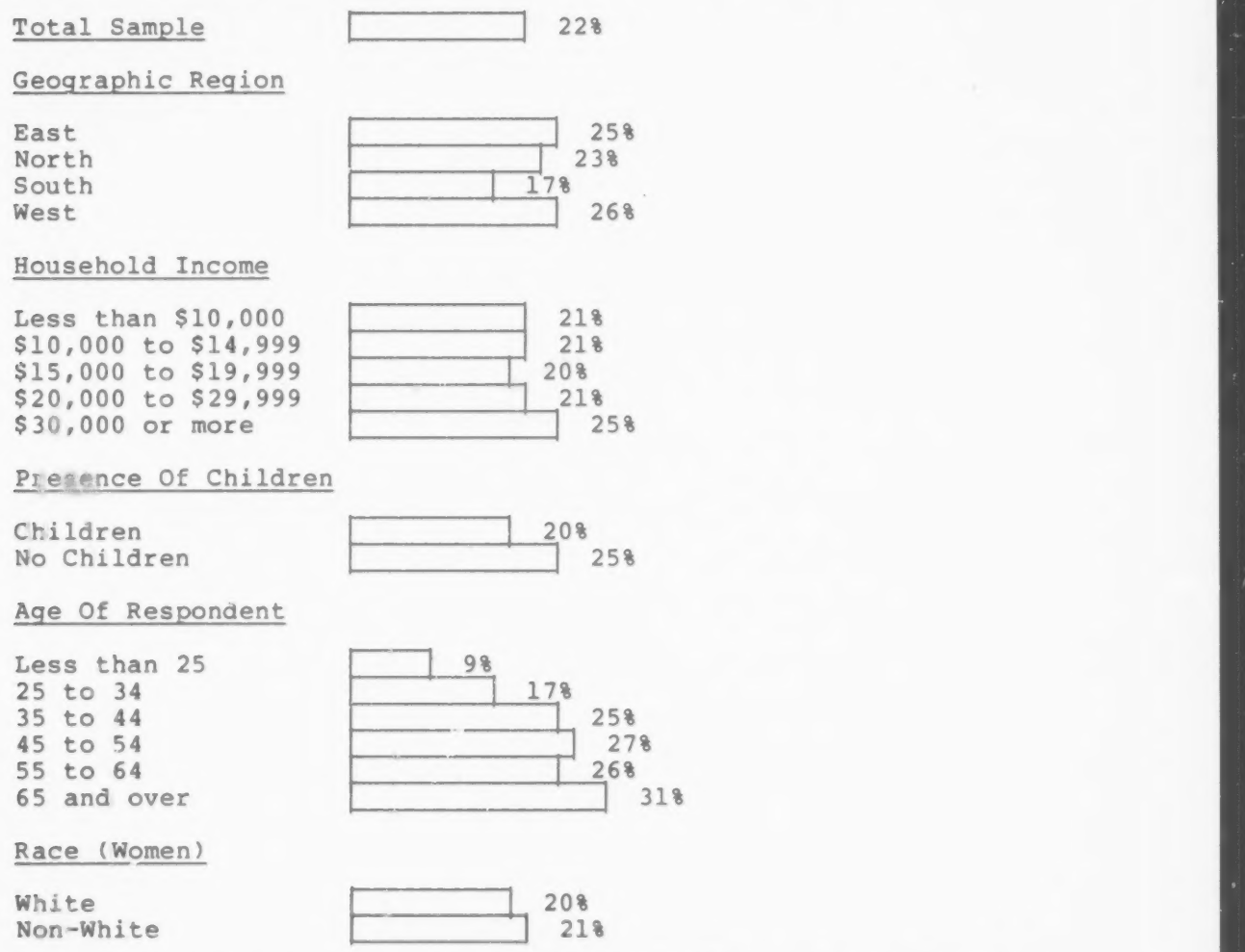
Base: In-Store Bakery Where Shop	Total Sample (2271)	Involved In Shopping		Family Status	
		Men (373)	Women (1532)	Parents (1349)	Non-Parents (1655)
Frequency of making special trip to bakery					
Once a week or more often	9%	10%	9%	9%	10%
About every two weeks	5	7	4	5	5
Two to three times a month	4	6	3	4	4
About once a month	6	7	6	7	5
Less than once a month	14	17	12	14	12
Never make special trip because of in-store bakery	61	52	64	61	63

Q. 28c - About how often do you make a special trip to the store where you do most of your grocery shopping to purchase bread, rolls or other baked goods from the in-store bakery section?

Although availability of the supermarket in-store bakery varies, availability is not due to lack of consumer use. For example, consumers have less opportunity to use an in-store bakery in rural areas, yet, where available, consumer use is identical to that of suburban and inner city areas. Regionally, the West Coast has fewer in-store bakeries, yet the in-store bakery shopping is highest in the West.

Proportion Of Sample Who Purchase
Baked Items Once A Week Or More From
An In-Store Bakery

Base: Available Where Shop



Q. 28b - How frequently do you purchase bread, rolls or other baked items from the in-store bakery section?

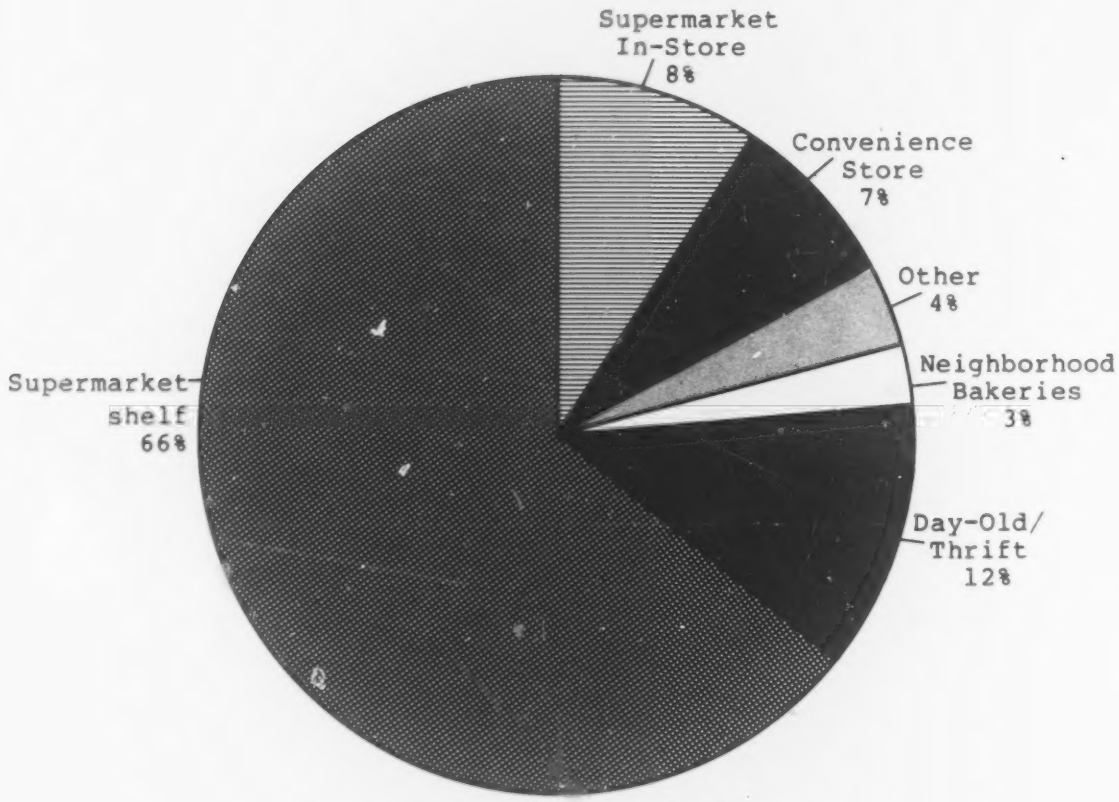
Demographic analysis of the in-store supermarket bakery consumer shows that the average person is somewhat older, has children and is least likely to live in the South.

Where Purchased Last Ten Loaves Of White Bread

When we asked consumers to indicate where they purchased their last ten loaves of white bread, only 19% indicated they had purchased white bread from the in-store bakery section of the supermarket. This suggests that the major items being purchased by consumers from the in-store bakeries are sweet goods, rolls and various breads other than white bread. This may also simply reflect limited fresh white bread availability from these sections.

Based on where consumers purchased their last ten loaves of white bread, the major portion of white bread sales (66%) is from the supermarket grocery shelf. The rest of the white bread sales are fragmented among thrift stores, convenience stores, etc. In looking at these share numbers, note that these figures are not adjusted for a given consumer frequency of purchase. Specific outlets may be over- or under-stated in importance.

Share Of Market Based On Where Last
Ten Loaves Of Bread Were Purchased



Q. 34b - Please think about the last 10 loaves of white bread you purchased. I'd like to know where you made these purchases. For each location listed below, please write in how many of the last 10 loaves of white bread you purchased were made from that location. Write in "0" if none were made from any particular location. Remember, your total should equal 10.

Where White Bread Is Purchased

	Did Not Purchase At Least One Loaf Out Of The Last Ten Purchases From	Purchased At Least One Out Of The Last Ten Purchases From	1-3 Loaves	4-7 Loaves	8+ Loaves
Shelf in supermarket where both branded/store brand located	33%	67%	12%	19%	36%
In-store bakery section of supermarket	81	19	12	4	3
Convenience store	82	18	14	3	1
Neighborhood bakery	93	7	5	1	1
Thrift store	82	18	5	8	5
All other places	94	6	2	3	1

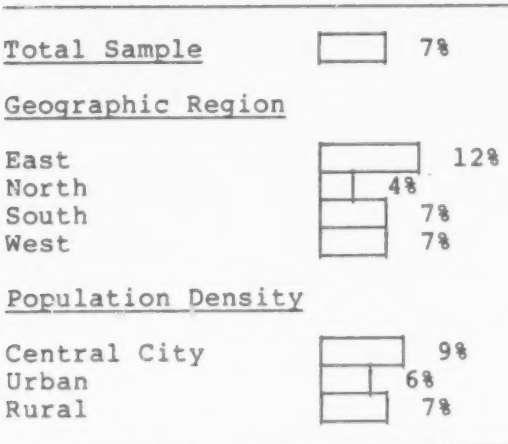
Base: Purchased and served white bread in home during the past four weeks. (N=1877)

Q. 34b - Please think about the last 10 loaves of white bread you purchased. I'd like to know where you made these purchases. For each location listed below, please write in how many of the last 10 loaves of white bread you purchased were made from that location. Write in "0" if none were made from any particular location. Remember, your total should equal 10.

Fresh Pasta Section

Consumers were asked if the store where they did most of their grocery shopping had a fresh pasta section. Overall, few consumers (7%) are exposed to fresh past sections where they shop. Regionally, fresh pasta sections ar ost prevalent in the East (12%) and in the central city (9%)

Does Usual Grocery Store Where Shop Have Fresh Pasta Section



Purchase of fresh pasta, where available, indicates that trial and frequency of purchase is significant. Specifically:

- 32% purchase fresh pasta from their supermarket at least once a month or more and another 15% buy it less frequently.
- 49% have not purchased fresh pasta from their supermarket, where available.

SECTION II

HOW THE CONSUMER PERCEIVES DIFFERENT FOODS

An important part of the study measured people's opinions regarding different wheat-based products and certain other foods, such as fresh fruit, potatoes, eggs, milk, chicken and ground beef. Including other foods provided a point of reference for seeing how people position wheat products relative to other, everyday foods.

The questioning technique consisted of asking respondents to indicate which of a number of statements, in their opinion, described each product. Some typical statements were: natural, provides quick energy, good tasting, fattening, etc. In total, 25 different products were evaluated using a list of 34 statements. In addition, some products were evaluated on separate, special-purpose lists of statements. Each product has a score for each statement, enabling more than 1,000 comparisons. We also conducted a special statistical analysis.

To reduce the task of making comparisons and to identify the major areas which explain differences between products, a special statistical analysis was conducted. The purpose was to summarize product differences in such a way that they could be plotted on a two-dimensional graph. Such a graph may be called a product map, or a bi-plot.

Both the food products and the attributes used to describe the products are plotted on the product maps. Here are guidelines to help you interpret the map:

- The two axes, one vertical and one horizontal, represent the components which explain most of the variability among the foods included in the analysis.
- Distances between products correspond to their relative image differences.
- The vectors (arrows) going from the center of the space represent the statements or attributes.
- The longer the vector, the larger the differences among the products on that attribute.
- The angles between vectors represent correlations between attributes. A small angle denotes a high positive correlation. A 90-degree angle equals a zero correlation, meaning that the attributes are independent of each other. Angles greater than 90 degrees denote negative correlations.

- o Products scoring highest on an attribute (e.g., pizza on "fattening") are further away from the map's center than lower-scoring products. Perpendicular lines drawn from the product points to a vector approximate the vector's line-up of products.

25 PRODUCT SUMMARY

The product map within this section summarizes perceived differences among all 25 products which were measured on a common set of 34 attributes. The product list included:

Dry Macaroni	Packaged Cookies	Chicken
Dry Spaghetti	Package Donuts	Eggs
Egg Noodles	Pizza	Fresh Fruit
English Muffins	Rye Bread	Ground Beef
Fresh Pasta	Saltine Crackers	Milk
Hamburger Buns	Spaghetti w/meat sauce	Potatoes
Macaroni w/cheese	Tuna Noodle Casserole	
Macaroni Salad	Wheat	
Package Cakes	Wheat Bread	
	White Bread	

Examining product points and attribute vectors shows that consumers differentiate the most between products with the following combinations of attributes:

BAD	GOOD
Fattening Little nutritional value High in calories Junk food	Part of a balanced diet Nutritious Wholesome Good for growing children

As would be expected, the two attribute groups are opposites of each other; i.e., are negatively correlated with each other. For instance, if a food product scores high on the attributes in one group, it will score low in the other group.

Another combination of attributes on which consumers differentiate deals with starch content and how filling the food is believed to be.

Furthermore, consumers readily distinguish between their perceptions of products that constitute "junk food" and those that do not.

Here are some of the highlights of the information contained in the product maps:

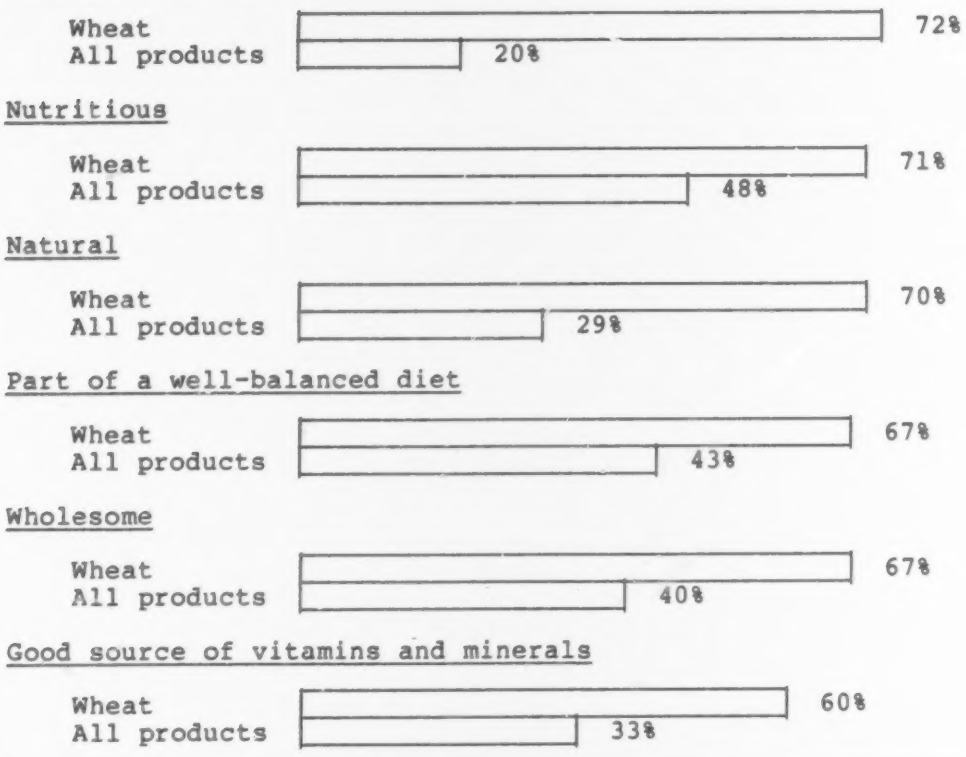
Wheat

When consumers evaluate "wheat" itself, rather than as an ingredient of a more complex food, they find the grain very nutritious, and it receives high positive scores on all attributes which denote being "good for you."

Of all the foods surveyed, wheat received the highest rating for providing roughage and fiber to the diet.

Proportion Of Sample
Who Agree With Statement

Base: Total Sample



Q. 29 - For each product listed across the top below, please "X" the statement which, in your opinion, describe that product. First, "X" the statements for "Whole Milk." Then, go to "Packaged Cookies," and so on.

Additionally, wheat falls in the same general area as chicken, eggs, milk, ground beef and fruit in terms of being wholesome, natural and nutritious. It also has the advantage of offering roughage, which most of the latter foods are not seen as providing.

There appear to be no major negatives in consumers' perceptions of wheat itself. In fact, the grain is perceived as being liked when it is not part of a specific food.

Although wheat has good consumer perception in many nutritionally related areas, the foods containing wheat are not described positively except for wheat and rye bread.

These other wheat-based products -- white bread, English muffins, crackers, hamburger buns, spaghetti, macaroni, macaroni w/cheese, macaroni salad, noodles, fresh pasta -- are described as less essential for a well-balanced diet. They are seen as less wholesome and less natural than wheat itself, wheat bread or rye bread.

Obviously, adding other ingredients such as butter, sugar and salt and refined flour's processing diminish the perception of wheat.

Proportion Of Sample
Who Agree With Statement

	Selected Wheat-Based Products			
	Wheat	White Bread	Packaged Snack Cakes	Spaghetti (Dry Packaged)
Provides roughage/ fiber	72%	19%	2%	13%
Natural	72	13	1	10
Nutritious	71	41	4	35
Wholesome	67	34	3	26
Part of a well-balanced diet	67	42	1	29
Good source of vitamins & minerals	61	30	2	17

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Whole Milk." Then, go to "Packaged Cookies," and so on.

Breads

There are major differences in the consumer perception of breads. Specifically, wheat bread is rated more positively in terms of nutrition than white bread and is seen as having less starch, fewer calories and is less filling. Additionally, white bread is perceived as more suitable for children than wheat bread which is seen as an adult food.

On only one positive attribute -- freshness -- does white bread out perform wheat bread.

Comparison Of Wheat Vs. White Bread

Selected Statement	% Who Agree		Net Difference (Wheat vs. White)
	White	Wheat	
Provides roughage/fiber	19%	68%	+49
Wholesome	34	65	+31
Nutritious	41	70	+29
Natural	13	42	+29
Part of a well-balanced diet	42	70	+28
Good source of vitamins & minerals	30	55	+25
Good for growing children	35	57	+22
Liked especially by children	44	11	-33
Fattening	45	15	-30
High in starch	59	31	-28
High in calories	41	18	-23
Low in fiber	30	7	-23

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Whole Milk." Then, go to "Packaged Cookies," and so on.

The respondents were also asked to describe five different bread products using a special list of bread-oriented product attribu-

tes. Responses were then analyzed using the statistical mapping procedure to identify how the products are perceived along these product-oriented attributes.

The findings show how consumers differentiate among the five bread products.

- Both white bread and hamburger buns are characterized as soft/spongy and bleached.
- White bread is the only product widely acknowledged for French toast.
- Wheat bread and rye bread are noted for grainy, firm texture as well as for providing roughage and fiber.
- Wheat bread and rye bread are frequently mentioned as having more natural vitamins and for being nutritious.
- English muffins are seen as firmer in texture than white bread, more expensive than most bread products, less flavorful than wheat bread, and more flavorful than hamburger buns or white bread.
- Wheat bread and rye bread are about equal to wheat in terms of wholesomeness/goodness.

- Wheat bread is almost equivalent to wheat itself as a source of fiber. Rye bread and fresh fruit are the only other products high in fiber.

Results when analyzed by consumers who frequently serve a product vs. those who have not served recently show differences in opinion in the areas of:

- Nutrition
- Taste
- Price/Value

Selected Bread Products
Proportion Who Agree With Statement

	White Bread			Wheat Bread			Rye Bread		
	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently
Fattening	45%	47%	45%	15%	14%	16%	21%	24%	19%
Part of a well-balanced diet	42	54	29	70	80	65	60	76	57
Low in cholesterol	14	16	12	27	38	22	31	36	30
Good food value for the money	33	45	23	46	59	39	37	52	34
Good for growing children	36	47	25	57	67	51	47	60	44
Low in carbohydrates	4	5	3	12	15	11	17	16	19
Provides roughage and fiber	19	25	15	68	75	63	64	70	65
High in starch	59	61	59	31	33	31	33	34	32
Good tasting	48	61	36	59	73	50	63	80	57
High in calories	41	43	39	18	18	17	26	27	25
Few preservatives/ additives	12	16	9	27	32	25	36	36	36
Liked especially by adults	36	43	28	56	65	51	69	74	67
High in carbohydrates	42	41	44	28	33	25	30	41	28
Not much food value	20	14	26	3	2	4	5	7	4
Good source of vitamins & minerals	30	35	24	55	60	52	53	54	53
Good source of protein	15	18	11	27	25	28	29	26	30
Little nutritional value	21	15	28	2	2	3	6	5	5
High in cholesterol	8	8	8	2	2	3	4	4	4
High in sugar	12	12	12	3	4	3	5	6	5
I enjoy eating frequently	30	43	17	42	62	29	40	64	33
Bad for you	14	10	20	2	1	2	2	2	1
Liked especially by children	44	41	45	11	13	9	5	9	4
Filling	52	53	50	48	55	43	53	68	48
Low in fiber	30	23	36	7	7	7	9	8	10
High in salt content	22	21	24	7	7	8	14	14	13
Junk food	5	3	8	1	*	1	1	2	1
High in fat	11	10	12	3	2	3	2	1	2
Expensive	13	11	15	21	18	23	42	36	43
Natural	13	14	12	42	46	40	57	59	57
Wholesome	34	36	29	65	70	60	64	71	63
Product I trust	32	38	23	47	58	38	45	58	42
Provides quick energy	14	12	14	17	19	15	22	28	21
Fresh	33	30	31	37	34	36	48	52	47
Nutritious	41	38	38	70	71	68	68	71	67

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Whole Milk." Then, go to "Packaged Cookies," and so on.

Selected Bread Products
Proportion Who Agree With Statement

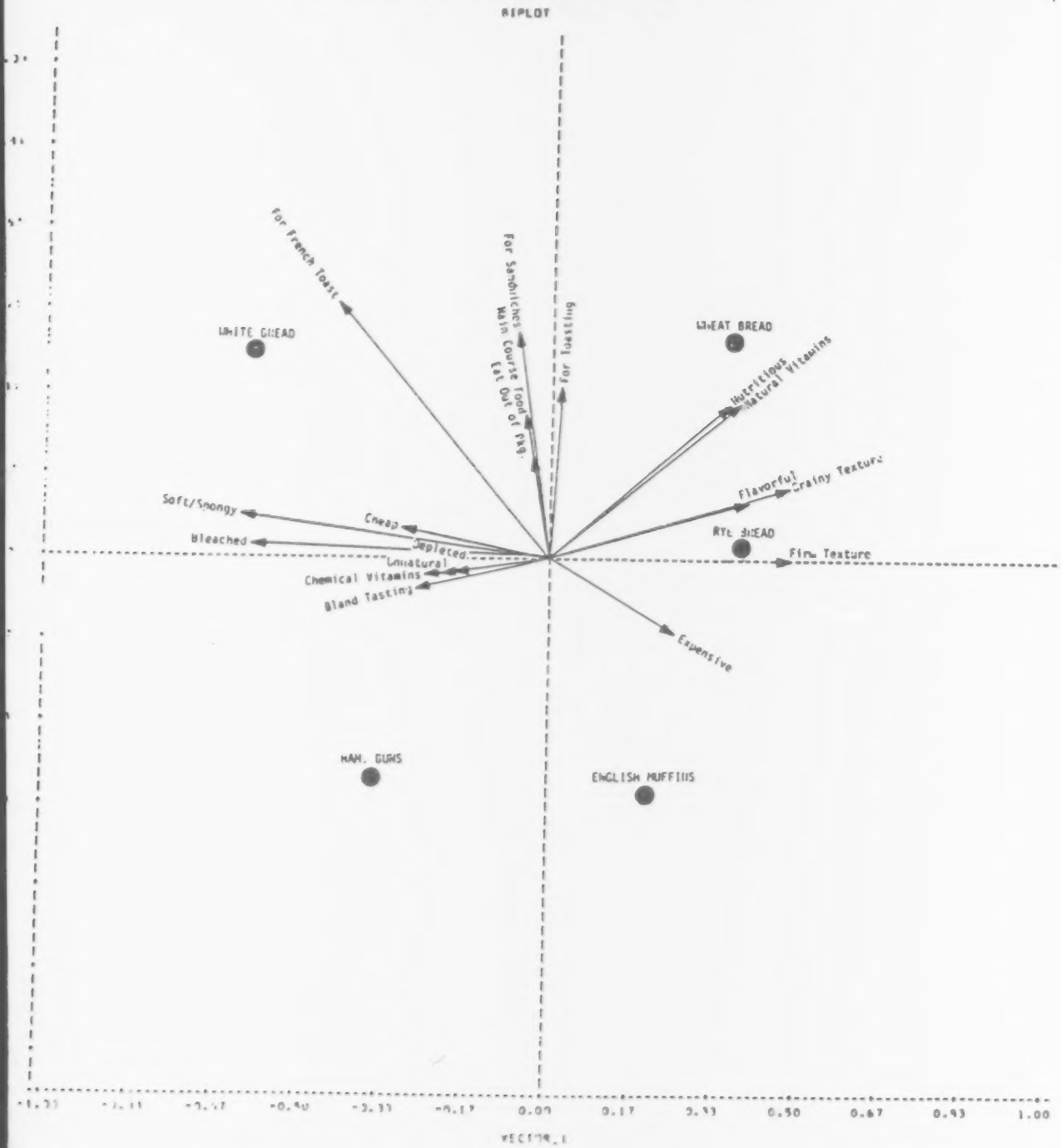
	White Bread			Wheat Bread			Rye Bread		
	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently
Soft/spongy	73%	79%	71%	20%	22%	21%	8%	9%	8%
Bland tasting	35	29	44	10	7	13	11	4	13
Flavorful	30	36	25	68	81	58	64	83	58
Unnatural	26	19	34	3	2	3	3	2	4
Expensive	17	18	18	35	31	37	43	43	44
For Sandwiches	81	90	71	82	89	77	74	87	69
Firm Texture	13	14	11	53	59	48	62	73	59
Cheap	37	[illegible]	38	7	10	6	3	3	2
Bleached	70	[illegible]	73	2	1	3	2	1	2
For toasting	82	90	72	74	84	67	41	58	35
For french toast	83	89	76	28	36	23	5	4	5
Nutritious	36	41	28	80	87	74	65	78	62
Depleted	21	16	29	3	1	3	4	2	4
Natural vitamins	22	25	21	69	76	63	55	64	53
Chemical vitamins	44	43	45	17	21	14	17	19	16
To be served with main course	53	58	46	52	57	48	40	56	35
Grainy texture	4	2	5	59	56	59	44	43	45
For eating right out of package	59	60	55	57	62	53	50	60	46

Q. 31a - Down the side below is a list of statements that people have made about different kinds of food products. Across the top are different types of products. For each, please "X" all the statements that you feel describe it.

ANALYSIS OF PRODUCT DIFFERENCES - BREAD PRODUCTS AND ATTRIBUTES

ANALYSIS OF MEANS AFTER REMOVING THE VARIABLE MAIN EFFECT

BIPLOT



Spaghetti, Macaroni, Noodles

Spaghetti and macaroni have similar profiles in the minds of consumers. Both are associated mostly with high starch content, being filling and fattening, and having low nutritional value. They also are seen as a good value for the money and products children especially enjoy eating.

Egg noodles, however, are perceived as somewhat less fattening, less filling and somewhat nutritious -- probably as the result of the addition of eggs. The latter also causes egg noodles to be rated somewhat higher in cholesterol than spaghetti or macaroni.

Combining other ingredients with the pasta product -- such as spaghetti and meat sauce, macaroni and cheese, macaroni salad and tuna noodle casserole -- tends to increase both positive and negative perceptions of the overall dish, specifically:

- Spaghetti with meat sauce and tuna noodle casserole are singled out for their higher protein content.
- Macaroni w/cheese is identified with a higher cholesterol level.
- The combination products -- spaghetti w/meat sauce, tuna noodle casserole and macaroni w/cheese are labeled "nutritious" more frequently than the plain products.

Following is a comparison of the key ratings for spaghetti, macaroni and egg noodles.

Selected Pasta Products
Proportion Who Agree With Statement

	Spaghetti			Macaroni			Egg Noodles		
	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently
Fattening	55%	58%	53%	55%	56%	54%	43%	44%	41%
Part of a well-balanced diet	29	37	24	30	34	24	33	42	28
Low in cholesterol	17	20	14	18	20	14	13	12	13
Good food value for the money	51	56	47	54	56	51	43	51	36
Good for growing children	30	36	27	29	33	25	35	42	28
Low in carbohydrates	4	6	4	4	6	4	6	6	6
Provides roughage and fiber	13	18	11	12	14	11	11	11	10
High in starch	74	77	71	75	75	73	69	70	66
Good tasting	54	60	47	52	57	46	53	59	46
High in calories	47	47	46	46	45	47	41	44	38
Few preservatives/ additives	21	21	19	21	20	19	21	22	18
Liked especially by adults	43	49	39	37	41	32	42	46	38
High in carbohydrates	47	50	45	48	48	45	43	46	40
Not much food value	18	16	18	18	17	20	13	11	13
Good source of vitamins & minerals	17	18	16	16	18	12	24	27	21
Good source of protein	16	19	16	15	17	14	20	23	19
Little nutritional value	19	15	21	20	19	22	15	13	16
High in cholesterol	9	11	9	9	11	8	24	27	23
High in sugar	2	2	2	2	3	2	2	3	2
I enjoy eating frequently	36	47	30	33	42	24	32	42	23
Bad for you	5	5	5	5	5	6	3	2	3
Liked especially by children	53	53	53	50	50	46	31	37	26
Filling	71	70	70	72	71	68	59	66	53
Low in fiber	26	19	28	28	24	29	29	30	28
High in salt content	15	16	14	14	15	12	15	15	15
Junk food	2	3	3	3	2	4	2	2	2
High in fat	10	11	10	9	10	10	11	11	11
Expensive	3	4	4	3	3	4	6	6	6
Natural	10	10	9	10	11	9	15	16	13
Wholesome	26	23	26	28	28	26	32	37	28
Product I trust	36	37	34	37	39	34	32	39	24
Provides quick energy	14	12	14	13	11	14	11	14	9
Fresh	5	6	6	6	7	6	10	11	8
Nutritious	35	30	35	36	36	32	42	48	36

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Macaroni (Dry Packaged)." Then go to "Potatoes," and so on.

Product Profile
Spaghetti, Macaroni, Noodles
Proportion Who Agree With Statement

	Spaghetti (Dry Packaged)	Macaroni (Dry Packaged)	Fresh Pasta	Egg Noodles	Spaghetti* with Meat Sauce	Macaroni* And Cheese	Macaroni* Salad	Tuna* Noodle Casserole
Fattening	55%	55%	60%	43%	63%	61%	50%	37%
Filling	71	72	65	59	81	77	64	74
High in starch	74	75	69	69	72	76	68	59
High in calories	47	46	52	41	63	63	51	45
High in carbohydrates	47	48	44	43	47	49	45	40
High in salt	15	14	18	15	32	27	20	30
High in sugar	2	2	5	2	7	4	6	4
Bad for you	5	5	7	3	5	5	5	4
High in fat	10	9	16	11	26	24	17	12
High in cholesterol	9	9	17	24	24	30	17	15
Junk food	2	3	7	2	2	3	4	2
Low in nutrition	19	20	16	15	5	5	16	5
Little food value	18	18	15	13	5	6	16	5
Low in fiber	26	28	26	29	29	32	32	31
Fresh	5	6	36	10	20	20	26	19
Part of a well balanced diet	29	30	23	33	48	52	37	55
Nutritious	35	36	35	42	62	62	47	65
Good for growing children	30	29	24	35	53	57	34	53
Wholesome	26	28	29	32	43	43	33	46
Good source of vitamins and minerals	17	16	20	24	40	39	32	46
Provides roughage and fiber	13	12	12	11	15	13	17	14
Good source of protein	16	15	14	20	52	53	23	60
Provides quick energy	14	13	16	11	25	25	17	22
Few preservatives/additives	21	21	32	21	26	26	25	27
Natural	10	10	24	15	18	21	16	18
Low in carbohydrates	4	4	4	6	6	4	6	10
Product/trust	36	37	23	32	43	46	32	37
Low in cholesterol	17	18	13	13	11	8	14	20
Good food value for the money	51	54	28	43	63	67	47	64
Expensive	3	3	20	6	11	6	7	14
Good tasting	54	52	54	53	80	76	66	66
I enjoy eating frequently	36	33	30	32	62	53	36	36
Liked especially by adults	43	37	51	42	68	55	55	56
Liked especially by children	53	50	31	31	72	68	23	30

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Macaroni (Dry Packaged)." Then, go to "Potatoes," and so on.

*Q. 11a - For each dish listed across the top below, please "X" the statements which, in your opinion, describe that dish.

ANALYSIS OF MEANS AFTER REMOVING THE VARIABLE MAIN EFFECT

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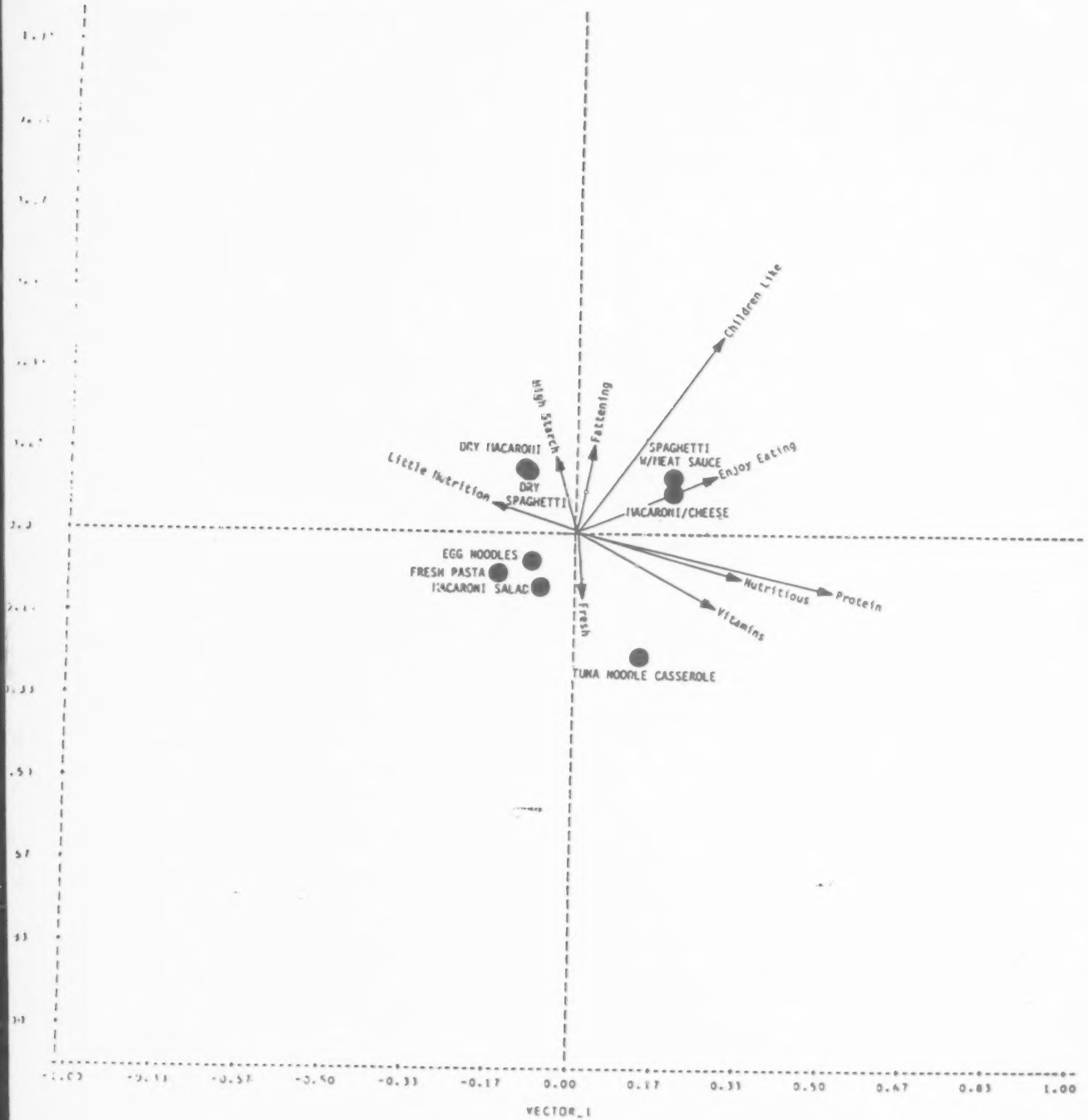

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Wheat-Based Snack Foods

Packaged cookies, snack cakes and donuts are generally described as fattening, high in sugar, junk food and expensive. They also are seen as good tasting and liked especially by children. These foods are perceived to have relatively little nutritional value other than as a source of quick energy.

Consumers tend to associate snack foods with sugar, butter, etc., rather than with wheat.

Saltine crackers receive a much lower negative rating than the other snack foods surveyed. The major negative factor cited for Saltine crackers is their high salt content.

Some notable differences between products:

- Fruit pies have a halo effect from fruit filling. Relative to other products in category, fruit pies are more likely to be seen as having natural and high-quality ingredients. However, the overall level on these dimensions is still quite low ... 21% natural and 22% made from high quality ingredients.

- Donuts are more likely to be characterized as greasy (37%) but good for breakfast (46%) vs. other wheat-based sweet goods.

- Snack cakes are more likely to be seen as too sweet than either fruit pies or donuts.

Wheat-based Snacks
Selected Products

	Packaged Cookies			Packaged Donuts			Packaged Snack Cakes		
	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently	Total Sample	Serve Frequently	Not Served Recently
Fattening	84%	89%	81%	84%	85%	83%	85%	89%	84%
Part of a well-balanced diet	3	3	2	2	3	1	1	3	1
Low in cholesterol	6	7	6	5	5	5	6	6	5
Good food value for the money	4	5	3	3	4	3	3	7	2
Good for growing children	5	6	4	3	5	2	3	5	3
Low in carbohydrates	3	4	2	2	3	2	3	3	2
Provides roughage and fiber	4	5	4	2	3	2	2	2	2
High in starch	40	43	39	51	50	51	49	51	49
Good tasting	63	73	55	61	67	57	59	72	56
High in calories	73	75	72	75	73	75	76	78	75
Few preservatives/ additives	5	6	5	6	5	6	5	5	5
Liked especially by adults	20	23	17	34	40	30	25	31	23
High in carbohydrates	44	43	45	48	47	48	48	46	49
Not much food value	63	66	61	62	60	63	65	62	65
Good source of vitamins & minerals	2	2	2	2	2	1	2	2	2
Good source of protein	2	2	1	1	2	1	1	2	1
Little nutritional value	68	68	67	64	65	65	66	65	65
High in cholesterol	15	16	14	23	24	24	21	17	22
High in sugar	84	88	81	79	81	78	80	82	79
I enjoy eating frequently	26	37	17	23	37	17	20	34	15
Bad for you	51	52	52	50	46	51	53	52	54
Liked especially by children	81	86	77	73	77	71	77	86	75
Filling	32	33	31	43	47	40	40	42	38
Low in fiber	31	28	31	35	36	35	35	35	36
High in salt content	21	20	22	18	19	18	19	21	19
Junk food	74	76	74	70	70	70	76	79	75
High in fat	33	33	32	41	40	41	37	33	37
Expensive	64	63	64	59	58	58	62	61	62
Natural	2	2	2	2	2	1	1	2	1
Wholesome	4	4	4	4	5	3	3	2	3
Product I trust	7	7	5	7	12	4	6	10	4
Provides quick energy	40	38	38	38	38	36	41	45	38
Fresh	7	8	5	11	15	8	9	11	7
Nutritious	5	5	5	4	6	4	4	6	4

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product.

Wheat-based Sweet Good Products Profile
Frequently Served In Home Vs. Those Who
Have Not Served Recently

	Individual Fruit Pies			Packaged Donuts			Packaged Snack Cakes		
	Total	Serve Frequently	Not Served Recently	Total	Serve Frequently	Not Served Recently	Total	Served Frequently	Not Served Recently
Greasy	18%	16%	19%	37%	26%	41%	10%	8%	10%
Good value for the money	12	17	10	11	13	9	9	15	8
Product I trust	16	25	14	14	22	10	12	21	9
Children like them	77	78	76	85	85	84	89	95	87
Convenient	75	75	76	78	84	74	81	90	78
Made with high quality ingredients	22	20	21	14	16	13	13	14	12
Fattening	81	75	82	88	86	88	89	94	89
Poor texture	19	17	20	16	14	18	17	20	17
Not particularly good for snacking	29	25	30	31	22	36	31	29	33
Too sweet	51	58	52	41	29	45	64	45	68
Made with natural ingredients	21	26	20	10	11	8	7	11	7
Low in carbohydrates	6	10	5	4	8	3	4	3	4
High in carbohydrates	56	42	58	61	55	64	61	57	63
Low in sugar	5	7	5	3	5	3	1	1	1
High in sugar	86	86	87	87	87	86	94	92	93
Low in protein	47	42	48	51	48	51	52	49	52
High in protein	10	10	10	6	11	5	5	8	5
Provides quick energy	54	50	54	51	53	51	58	60	55
Good for breakfast	12	18	10	46	59	40	8	15	6
Particularly good for snacking	49	63	46	41	55	34	50	66	46

Q. 31 - Down the side below is a list of statements people have made about packaged snack cakes, individual fruit pies and donuts with a hole in the center. (Packaged snack cakes are cupcakes and chocolate covered or creme filled cakes. Packaged snack cakes and individual fruit pies are sold in individual and family size packages.) Please "X" all the statements you feel describe each product -- whether or not you use them personally.

Non-Wheat Foods

Included in the survey are several non-wheat products to provide a comparison with the wheat-based products. Of the non-wheat foods:

- Whole milk, fresh fruits, eggs, ground beef and chicken receive high marks for nutrition, good food value for the money, and for being foods people like to eat.

- Baked potatoes are perceived as fattening but also as very enjoyable and providing nutrition.

- Pizza, like snack cakes and cookies, is considered to be fattening, junk food, low in nutrition, expensive but very enjoyable. In spite of the addition of various ingredients to the crust, pizza is perceived to have very little nutritional value.

While the product map and analysis explains most of the differences among the products, some differences cannot be captured in a two-dimensional presentation.

The analysis explains about 75% of the variability of people's perceptions of the 25 products on the 34 attributes. Specifically:

	Percent of Variance Explained by the Bi-plot
Component I	61%
Component II	14%
Total - I and II	75%

The following notable differences are not visible or are unexplained from the data on the product map:

- The fact that wheat in its natural form is not good tasting and that most people would not enjoy eating it frequently.
- The amount of roughage and fiber in wheat, wheat bread and rye bread.
- The high cholesterol content in eggs.
- The amount of protein in meat, fish, eggs and tuna noodle casserole.
- The extent of which some foods are especially liked by children: spaghetti with meat sauce, macaroni and cheese, fruit, hamburger buns, milk and pizza.

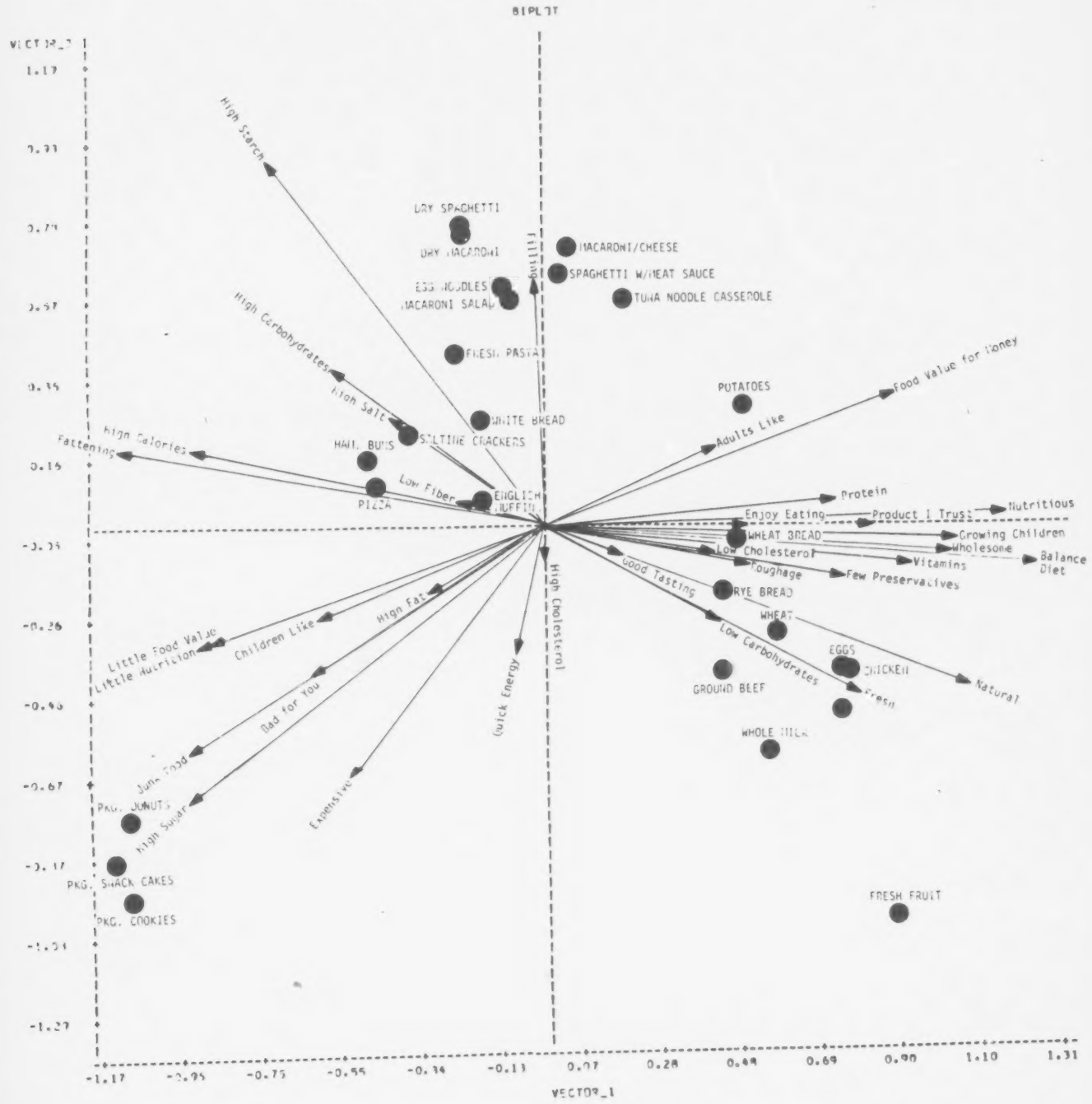
Miscellaneous
Product Profiles
Proportion of Sample Who Agree With Statement

	Whole Milk	Fresh Fruits	Eggs	Ground Beef	Chicken	Baked Potatoes	Pizza	Saltine Crackers
Fattening	38%	2%	5%	17%	4%	32%	67%	27%
Filling	38	33	30	51	45	73	66	26
High in starch	2	3	3	2	1	69	51	50
High in calories	34	4	8	25	5	26	65	24
High in carbohydrates	11	10	8	7	3	39	40	31
High in salt	2	*	1	4	2	2	36	73
High in sugar	2	13	*	1	1	1	5	3
Bad for you	4	1	4	3	1	2	11	7
High in fat	35	*	9	46	12	5	31	6
High in cholesterol	22	1	73	27	6	5	22	6
Junk food	1	*	1	2	1	1	32	8
Low in nutrition	2	2	2	3	3	3	20	39
Little food value	2	2	1	2	1	3	19	38
Low in fiber	32	8	32	26	29	17	25	28
Fresh	69	85	67	45	54	52	14	12
Part of a well balanced diet	72	84	76	67	80	71	16	11
Nutritious	81	85	77	65	77	68	32	16
Good for growing children	80	81	67	59	70	58	20	18
Wholesome	77	74	64	43	59	58	17	16
Good source of vitamins and minerals	71	77	41	37	41	57	21	8
Provides roughage and fiber	2	62	3	7	6	28	11	14
Good source of protein	50	17	68	73	73	21	24	5
Provides quick energy	33	53	18	15	13	16	18	10
Few preservatives/ additives	45	63	59	45	56	57	15	14
Natural	61	81	71	36	55	68	6	7
Low in carbohydrates	16	38	27	27	40	10	3	8
Product/trust	63	70	63	47	61	60	20	31
Low in cholesterol	11	51	5	13	43	32	5	18
Good food value for the money	56	62	68	55	76	68	18	27
Expensive	22	38	8	30	8	5	48	8
Good tasting	66	81	65	72	78	69	72	53
I enjoy eating frequently	27	75	49	61	72	59	50	32
Liked especially by adults	27	59	59	59	66	63	56	32
Liked especially by children	60	62	25	56	51	38	73	47

Q. 29 - For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for "Macaroni (Dry Packaged)." Then, go to "Potatoes," and so on.

ANALYSIS OF PRODUCT DIFFERENCES - ALL PRODUCTS

ANALYSIS OF MEANS AFTER REMOVING THE VARIABLE MAIN EFFECT



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SECTION III

ADDITIONAL INSIGHT INTO PERCEPTION OF WHEAT-BASED FOOD

Perceptions of Various Wheat-based Food

This section of the report explores how consumers perceive different wheat based foods in terms of:

- o Major ingredients
- o Specific values in diet
- o Calories
- o Price/value

Perceived Ingredients

When consumers were asked to indicate what they felt were the three major ingredients of each of the nine wheat-based products, the vast majority (between 74% and 86% depending on the product) indicated they were quite aware that flour is the primary ingredient in all products.

However, beyond the recognition of flour, perceptions vs. actual composition show that consumers do not generally know what the major ingredients are. The three major ingredients in a typical white bread are flour, water, corn syrup (sugar) and all other ingredients are less than 2% each. However, nearly one out of three consumers mention preservatives and additives as one of the three major ingredients in white bread, one out of four consumers mention salt, and 15% cited vitamins and minerals.

Comparison between products in the same class show the following:

- The major ingredients in wheat bread and white bread are seen as similar (flour, yeast, and shortening). However, wheat bread overall is perceived to be significantly different from white bread. Fewer consumers cite wheat bread as containing preservatives, salt, water and sugar and are more likely to say it contains vitamins, minerals and whey.

- Spaghetti and macaroni are seen essentially the same way in terms of ingredients. The major ingredients are seen as flour, eggs and salt.

- The ingredients in egg noodles are seen as similar to spaghetti and macaroni with the addition of eggs.

- Packaged donuts, snack cakes and cookies are seen as very similar in ingredients. The major ingredients perceived by the consumer are flour, sugar and preservatives.

Analyzing results for specific wheat-based foods among consumers who regularly eat the specific food vs. those consumers who either do not or seldom consume the product indicate:

- With few exceptions, the overall perceptions of ingredients that comprise each product are essentially similar between frequent users and non-users. The exceptions are that non-users are less likely to mention ingredients such as flour, water, vitamins and minerals and are more likely to mention preservatives.

Consumer Perception Of Major Ingredients In Specific Food

Ingredients	White Bread	Wheat Bread	Spaghetti (Dry Packaged)	Macaroni (Dry Packaged)	Egg Noodles (Dry Packaged)	Packaged Snack Cakes*	Packaged Donuts	Packaged Cookies	Saltine Crackers
Flour	86%	81%	79%	79%	77%	74%	76%	74%	78%
Yeast	62	60	7	8	9	6	25	4	10
Shortening	42	38	26	26	23	41	44	46	44
Preservatives/ Additives	29	19	26	25	24	37	30	35	24
Salt	25	18	34	34	30	15	14	16	70
Water	22	18	30	30	24	10	9	9	24
Milk	17	16	10	10	13	15	16	14	8
Eggs	16	16	40	41	68	25	23	24	9
Sugar	15	11	4	5	5	79	74	80	6
Vitamins/ Minerals	15	27	17	16	13	4	3	4	7
Whey	7	13	9	9	7	3	4	3	6

Q. 26 - For each of the products listed below, please "X" the THREE major ingredients of the product.

Consumer Perception Of
Major Ingredients In White Bread/Spaghetti
By Interest In Nutritional Information

	White Bread				Spaghetti			
		Concern For Nutritional Information				Concern For Nutritional Information		
	Total Sample	High	Medium	Low	Total Sample	High	Medium	Low
Flour	86%	87%	87%	86%	79%	80%	81%	75%
Yeast	62	55	62	68	7	6	8	9
Shortening	42	44	42	38	26	26	25	27
Preservatives/ additives	29	31	29	26	26	21	28	27
Salt	25	27	25	23	34	36	34	35
Water	22	26	21	21	30	36	29	28
Milk	17	16	16	18	10	8	10	12
Eggs	16	15	15	17	40	35	41	42
Sugar	15	19	16	10	4	5	4	4
Vitamins/minerals	15	15	16	14	17	17	18	15
Whey	7	8	7	7	9	9	9	8

Q. 26 - For each of the products listed below, please "X" the THREE major ingredients of the product.

Consumer Perception Of Major Ingredient Pasta

	Spaghetti			Macaroni			Egg Noodles		
Base	Total Sample (3366)	Frequently Serve (742)	Not Served Recently (1416)	Total Sample (3366)	Frequently Serve (795)	Not Served Recently (1399)	Total Sample (3366)	Frequently Serve (669)	Not Served Recently (1774)
Flour	79%	81%	75%	79%	81%	75%	77%	79%	73%
Eggs	40	37	40	41	42	40	68	75	63
Salt	34	37	33	34	36	33	30	29	29
Water	30	33	28	30	30	28	24	24	24
Shortening	26	23	26	26	26	25	23	21	24
Preservatives/ additives	26	20	30	25	24	26	24	25	24
Vitamins/minerals	17	24	13	16	20	13	13	14	12
Milk	10	5	13	10	9	11	13	14	13
Whey	9	13	8	9	11	9	7	8	9
Yeast	7	6	9	8	8	9	9	9	10
Sugar	4	3	6	5	4	5	5	6	5

Q. 26 - For each of the products listed below, please "X" the THREE major ingredients of the product.

Perception Of Main Ingredient Of
Selected Sweet Goods By User Group

	Packaged Snack Cakes			Packaged Donuts		
Base	Total Sample (3366)	Frequently Served (395)	Not Served Recently (2349)	Total Sample (3366)	Frequently Served (225)	Not Served Recently (2700)
Sugar	79%	79%	77%	74%	79%	73%
Flour	74	78	74	76	77	74
Shortening	41	41	40	44	43	44
Preservatives/ additives	37	38	36	30	32	29
Eggs	25	28	25	23	25	21
Salt	15	19	15	14	13	14
Milk	15	17	14	16	19	15
Water	10	12	10	9	9	9
Yeast	6	8	6	25	28	23
Vitamins/minerals	4	6	3	3	4	3
Whey	3	3	3	4	3	4

Q. 26 - For each of the products listed below, please "X" the THREE major ingredients of the product.

Perception Of Main Ingredient Of
Selected Breads By User Group

	White Bread			Wheat Bread		
Base	Total Sample (3366)	Frequently Served (1303)	Not Served Recently (1461)	Total Sample (3366)	Frequently Served (1101)	Not Served Recently (1587)
Flour	86%	91%	83%	81%	85%	79%
Yeast	62	61	62	60	56	61
Shortening	42	42	41	38	37	38
Preservatives/ additives	29	22	34	19	16	19
Salt	25	31	21	18	19	17
Water	22	27	20	18	21	16
Milk	17	16	16	16	15	15
Eggs	16	14	16	16	15	17
Vitamins/minerals	15	22	11	27	31	26
Sugar	15	15	15	11	11	10
Whey	7	11	5	13	15	13

Q. 26 - For each of the products listed below, please "X" the THREE major ingredients of the product.

What Specific Foods Provide In Diet

To provide additional insight into how consumers see the differences between wheat based foods, respondents were asked to indicate what each specific food provided to a person's diet. They see the following:

White Bread

Most see white bread providing starch (72%), carbohydrates (59%), salt (59%), vegetable shortening (58%), salt (59%) and vitamins (50%).

Wheat Bread

Wheat bread, consistent with other perceptions, is also seen as providing more of the good things in a person's diet than white bread. Wheat bread is seen as providing fiber (67%); vitamins (60%); starch (57%); carbohydrates (52%) and salt (51%).

Macaroni/Spaghetti

Both products are seen as providing starch (79%); carbohydrates (58%) and salt (44%).

Snack Cakes/Donuts

Nearly eight out of ten consumers see the products as providing sugar; starch (51%); carbohydrates (51%); and empty calories (49%).

What Bread Provides To Diet

	White Bread			Wheat Bread		
	Total Sample	Serve Frequently	Not Served Frequently	Total Sample	Serve Frequently	Not Served Frequently
Starch	72%	77%	69%	57%	61%	54%
Salt	59	62	58	51	56	47
Carbohydrates	59	58	60	53	55	50
Vegetable shortening	58	56	59	55	58	53
Vitamins/minerals	50	57	44	60	61	59
Sugar	41	39	43	33	38	29
Minerals	36	46	28	47	54	44
Fiber	28	33	23	67	73	64
Vegetable protein	18	18	17	22	23	20
Empty calories	18	17	21	6	5	7
Trace minerals	17	18	16	25	29	22
Nitrates	17	13	18	15	13	15
Animal fat	12	14	11	8	9	8
Complex carbohydrates	12	14	12	14	17	13
Amino acids	7	7	6	8	9	8
Caffein	2	1	2	1	1	1
Meat protein	1	2	1	2	2	2

Q. 27 - For each product listed across the top below, please "X" all the things which you feel that food provides in a person's diet -- whether or not you, personally, eat it.

What Pasta Provides In Diet
Pasta Group

	Spaghetti			Macaroni			Egg Noodles		
Base	Total Sample (3366)	Frequently Serve (764)	Not Served Recently (1350)	Total Sample (3366)	Frequently Serve (832)	Not Served Recently (1307)	Total Sample (3366)	Frequently Serve (794)	Not Served Recently (1536)
Starch	79%	83%	76%	79%	84%	74%	77%	80%	75%
Carbohydrates	58	58	56	57	59	54	57	61	55
Salt	45	47	44	44	45	42	45	49	42
Vegetable shortening	33	29	34	34	34	32	36	38	34
Vitamins/minerals	32	38	29	31	35	25	35	39	31
Minerals	23	27	18	22	24	17	24	29	22
Vegetable protein	17	15	17	17	18	15	17	18	16
Fiber	14	17	14	14	17	13	14	17	15
Complex carbohydrates	13	17	11	13	14	11	12	11	11
Trace minerals	13	13	13	13	14	12	15	20	14
Empty calories	13	12	13	13	11	13	12	12	13
Sugar	12	12	12	12	12	12	12	13	12
Nitrates	10	7	12	10	10	10	10	12	9
Animal fat	7	8	7	7	8	6	8	10	8
Amino acids	5	7	5	5	5	4	7	8	6
Meat protein	3	3	2	3	3	3	5	5	5
Caffein	*	*	*	1	*	1	1	1	1

Q. 27 - For each product listed across the top below, please "X" all the things you feel that food provides in a person's diet -- whether or not you, personally, eat it.

What Wheat-Based Sweet Goods Provide To Diet

Base:	Packaged Donuts			Packaged Cookies			Packaged Snack Cakes		
	Total (3366)	Serve Frequently (625)	Not Served Frequently (2025)	Total (3366)	Serve Frequently (987)	Not Served Frequently (1528)	Total (3366)	Serve Frequently (395)	Not Served Frequently (2349)
Sugar	81%	85%	79%	82%	81%	81%	81%	82%	80%
Vegetable shortening	58	60	57	56	55	55	55	54	55
Starch	57	56	56	50	51	48	51	52	52
Carbohydrates	53	55	52	51	51	51	51	52	51
Empty calories	47	49	47	48	46	49	49	45	49
Salt	44	44	43	45	44	46	44	47	45
Animal fat	18	18	19	15	18	15	16	17	16
Vitamins/minerals	12	15	11	13	15	11	13	16	12
Complex carbohydrates	12	13	12	12	14	11	13	17	12
Nitrates	11	10	11	11	8	11	12	9	12
Vegetable protein	10	11	9	10	10	10	10	10	9
Minerals	8	9	8	9	11	8	9	11	8
Trace minerals	7	9	6	7	8	6	7	8	7
Fiber	5	5	5	6	7	6	5	5	4
Amino acids	3	4	4	4	5	3	4	3	4
Caffein	3	3	4	4	3	3	5	4	5
Meat protein	1	2	1	1	1	1	1	2	1

Q. 27 - For each product listed across the top below, please "X" all the things you feel that food provides in a person's diet -- whether or not you, personally, eat it.

Calorie Perception

The study was concerned with whether consumers, in fact, knew the calorie level of the various foods. In most instances, the consumer was asked the question for a specific product (e.g., one slice of white bread) and, in instances of the pasta group, the question was asked based on a traditional dish (e.g., 5-ounce serving of macaroni and cheese).

Few consumers actually knew the calorie level in products. In fact, white bread was seen on the average as containing twice the calories it actually contains ... 136 vs. 76. This confusion may be a result of nutritional labeling information on white bread which has defined a serving as two slices. However, the consumer may be interpreting the data as pertaining to one slice. In contrast, wheat bread is seen as having substantially fewer calories than white bread, while in fact they're similar. The reported calorie level was 117 calories which is nearly twice the actual level of 61. Obviously, such misconceptions are obstacles to consumption among those consumers who are concerned about calories.

The following table shows the results for all products. While differences exist among various groups, the overall conclusions are the same: most consumers do not know the actual calorie levels in the foods available to them.

Average Calorie Perceptions

Product	Correct Calorie Level*	Total Sample	Sex		Self Perception About Nutrition		
			Female	Male	High	Medium	Low
8-ounce whole milk	159	196	195	200	202	191	211
5-ounce spaghetti w/tomato sauce	163	394	392	402	391	388	429
5-ounce macaroni and cheese	269	350	348	353	350	340	391
One slice of wheat bread	61	117	115	121	118	112	138
One slice of white bread	76	136	134	143	135	134	145
2-ounce candy bar like Snickers	260	364	361	373	363	360	390
Saltine cracker	12	74	75	72	78	68	82
Medium-size apple	80	107	106	110	107	104	119
Medium-size potato	98	160	158	167	154	158	180
Cream-filled snack cake	160	419	417	425	423	411	450

*Source: Adams, Catherine F. Nutritive Value of American Foods In Common Units. USDA Agricultural Handbook #456.

Q. 40 - Please indicate the number of calories you feel are contained in each of the products listed below.

Price/Value

When asked to evaluate different foods in terms of "price/value," consumers rated the natural unprocessed foods substantially higher than processed foods. Some insight into how consumers perceived value can be inferred from the product perceptions. The foods with the highest price/value ratings were also more likely to be described as natural, wholesome, good for you. In contrast, the products with the lowest price/value ratings, snack cakes and donuts, were characterized as junk food, with little nutritional value.

Analyzing how those who frequently serve specific products within their household rated the product vs. those who have not recently served the product showed:

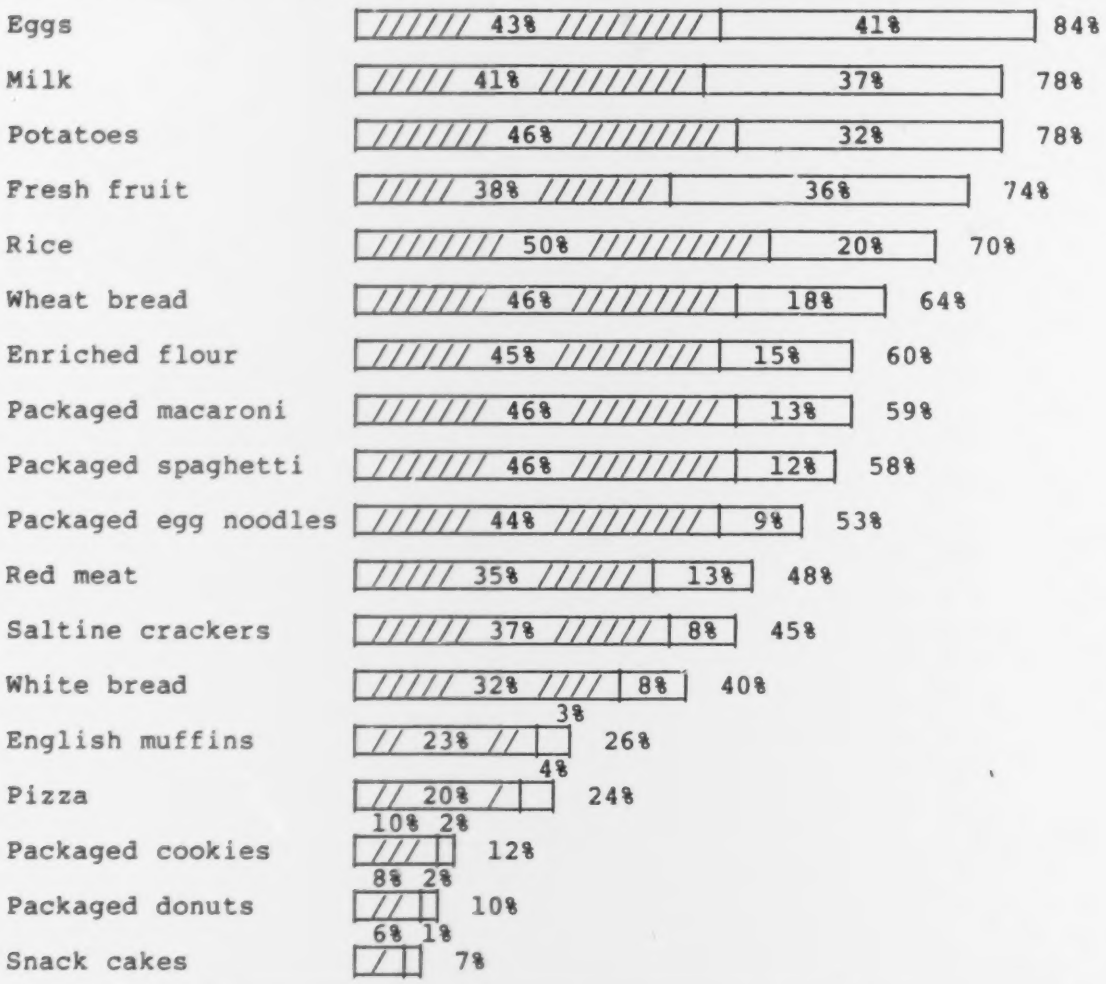
- Those who frequently serve a specific product rated the price/value of the product substantially higher than those who do not serve the product. However, while these differences are reflective of their use, certain products (e.g., snack cakes, donuts, English muffins, white bread) are not seen as being a good or excellent value for the money, even among users.

- Pasta products have a similar perception in terms of price/value whether viewed from a frequent user or non-user perspective. This is consistent with other questions which show these products to be seen as similar in terms of nutrition, taste, calorie level, etc.

- Snack products (packaged, wheat-based) are also seen as similar in price/value. These findings are consistent with other questions showing consumers tend to view these products similarly.

- Bread products are not seen as similar in price/value. Wheat bread is seen as a better price/value than white bread; white bread is seen as a better value than English muffins. The differences within this class of products are similar to other questions on product perceptions. This suggests strongly that people differentiate between bread products: for example, nutritional food, value, and children vs. adult usage.

Price/Value Perception
Total Sample



Q. 16 - For <u>each</u> of the products below, please "X" the one box that indicates how good a value you think it is for the money.

Key: Good Value

Excellent Value

Price/Value
Proportion Who Rated Good/Excellent Value

	Total Sample			Served					
				Frequently			Not Recently		
	Rated			Rated			Rated		
	Good	Excellent	Total	Good	Excellent	Total	Good	Excellent	Total
Dry Packaged Pasta Products									
Egg noodles	44%	9%	53%	51%	11%	62%	38%	6%	44%
Spaghetti	46	12	58	52	15	67	42	9	51
Macaroni	46	13	59	49	18	67	43	10	53
Bread Products									
White bread	32	8	40	39	11	50	23	6	29
Wheat bread	46	18	64	49	26	75	41	12	53
English muffin	23	3	26	37	6	43	17	2	19
Packaged Wheat-based Snacks/desserts									
Snack cakes	6	1	7	9	5	14	5	1	6
Donuts	8	2	10	11	3	14	6	1	7
Cookies	10	2	12	12	4	16	7	1	8

Q. 16 - For each of the products below, please "X" the one box that indicates how good a value you think it is for the money.

SECTION IV

FOOD CONSUMPTION

This section reports the following for more than 45 different foods:

- Percent of households serving a specific food during a four-week period.
- Change in purchasing in recent years.
- Who within the households are regular consumers of macaroni, spaghetti, white bread, donuts and snacking cakes.
- Demographics based on households frequently serving pasta, bread and sweet goods. (Demographics for other foods are available for specific products, on request from the Wheat Industry Council.)
- Product usage.
- Reasons for changes in product consumption.

Using a four-week period covers most food groups. For example, 92% of the respondents reported serving bread in the past four weeks; similarly, 89% served poultry. In an average month, consumers serve a variety of foods from each of the food groups.

Changes In Food Habits

In the past few years, consumers appear to have increased their purchases of food products having an aura of being good for you (wheat bread, 2% milk, chicken) and decreased purchases of wheat-based snack products which many consumers characterize as fattening with little nutritional value. In looking at the products which had major positive shifts; only one wheat-based product, wheat bread, reflects increased consumption. Consumption of all other wheat-based products either shows little change or significant decreases.

The following table provides a detailed break-down of the penetration and frequency various food items are served.

Incidence And Frequency Product Usage

Product	Incidence Served In Past 4 Weeks	Incidence Served* At Least Once A Day	Net Difference* (Purchase More/Less)
Breads			
White bread	57%	49%	-4
Rye bread	28	21	-11
Wheat bread	46	36	+25
English muffins	34	19	-5
Bagels	15	20	-1
Rolls	51	30	-26
Hamburger/hot dog buns	51	24	-18
Meat			
Pork/ham	68	22	-14
Red meat (except ground beef)	66	14	-17
Ground beef	82	15	+13
Poultry			
Chicken	84	9	+33
Turkey	45	12	-1
Fish			
Fish (except shellfish/seafood)	66	11	+9
Shellfish/seafood	35	10	-11
Pasta			
Spaghetti	58	3	-1
Macaroni	59	3	-2
Egg noodles	48	5	-11
Fruit			
Fresh fruit	73	32	+44
Canned fruit	55	10	-5
Sweet Goods/Snacks			
Packaged cookies	55	18	-12
Cake	42	6	-39
Packaged snack cakes	30	10	-19
Donuts	40	11	-32
Pie	29	9	-46
Crackers (except Saltines)	55	26	-6
Saltine crackers	56	6	-2
Pastries & sweet rolls	42	3	-41
Individual fruit pies	20	4	-40
Vegetables			
Potatoes	83	10	+1
Fresh vegetables (except potatoes)	76	16	+24
Canned vegetables	68	11	-9
Frozen vegetables	74	10	+9
Beverages			
Soft drinks (non-diet)	66	23	-9
Diet soft drinks	43	25	+27
Milk (whole)	52	40	+14
Milk (2%/low fat/skim)	46	43	+32
Fruit juice	67	40	+31
Fruit drinks	27	29	+4
Cereals			
Unsweetened cold cereal (except natural)	53	28	+9
Pre-sweetened cold cereal	36	30	-1
Oatmeal/other cooked cereals	43	15	+3
Natural cereal	25	29	+3
Other Foods			
Rice	74	12	+2
Pizza	58	10	-9
Eggs	81	14	+20
Cheese	85	16	+28

*Base: Those who served product past four weeks.

Q. 13 - In Column A below, please "X" those foods that you have served in your household in the past 4 weeks. Then, in Column B, for each food you have "X'd," please indicate how often you served the product by putting an "X" in one of the 7 boxes.

Q. 14 - For each type of food listed below, please indicate whether you buy more now, or buy less now for your household than a few years ago.

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Analyzing changes in consumption patterns shows a strong relationship with one's interest in nutrition. Consumers who are most concerned with nutrition were more likely to have cut back on breads (except for wheat bread), pasta, sweet goods, pizza, meats (except for ground beef) and non-diet soft drinks. At the same time, those consumers who are concerned with nutrition have increasingly used poultry, wheat bread, fish, fresh fruit and vegetables.

Product Most Frequently Served

Products	% Households Serve Daily
White bread	28%
Fruit juice	27
Fresh fruit	23
Milk (whole)	21
Milk (2%/low fat/skim)	20
Wheat bread	17
Rolls	15
Port/ham	15
Soft drinks (non-diet)	15
Unsweetened cold cereal (except natural)	15
Crackers (except Saltines)	14
Cheese	14
Hamburger/hot dog buns	12
Ground beef	12
Fresh vegetables (except potatoes)	12
Diet soft drinks	11
Pre-sweetened cold cereal	11
Eggs	11
Packaged cookies	10

Change in Consumption
By Concern For Nutritional Information*

	Net Change In* Consumption (By More/Less)			
		Nutritional Concern		
	Total	High	Medium	Low
Breads				
White bread	-4	-21	-2	+2
Rye bread	-11	0	-17	-14
Wheat bread	+25	+36	+24	+13
English muffins	-5	-11	-4	-4
Bagels	-1	+1	+1	-9
Rolls	-26	-30	-27	-19
Hamburger/hot dog bun	-18	-22	-17	-17
Meat				
Pork/ham	-14	-24	-11	-15
Red meat (except ground beef)	-17	-31	-14	-15
Ground beef	+13	0	+16	+14
Poultry				
Chicken	+33	+38	+34	+25
Turkey	-1	+14	0	-21
Fish				
Fish (except shellfish/seafood)	+9	+21	+8	-6
Shellfish/seafood	-11	0	-14	-22
Pasta				
Spaghetti	-1	-8	0	+6
Macaroni	-2	-8	-1	+1
Egg noodles	-11	-10	-10	-13
Fruit				
Fresh fruit	+44	+49	+45	+33
Canned fruit	-5	-4	-7	-7
Sweet Goods/Snacks				
Packaged cookies	-12	-23	-10	-8
Cake	-39	-43	-37	-38
Packaged snack cakes	-19	-26	-16	-19
Donuts (with hole in center)	-32	-36	-32	-29
Pie	-46	-45	-48	-45
Crackers (except saltines)	-6	-6	-4	-9
Saltine crackers	-2	-7	0	-5
Pastries & sweet roll	-41	-50	-42	-35
Individual fruit pies	-40	-48	-37	-40
Vegetables				
Potatoes	+1	-2	+1	+1
Fresh vegetables (except potatoes)	+24	+38	+24	+11
Canned vegetables	-9	-10	-10	-4
Frozen vegetables	+9	+13	+9	+4
Beverages				
Soft drinks (non-diet)	-9	-21	-10	+2
Diet soft drinks	+27	+21	+28	+33
Milk (whole)	+14	+8	+14	+16
Milk (2%/low fat/skim)	+32	+34	+33	+30
Fruit juice	+31	+38	+33	+19
Fruit drinks	+4	+5	+4	+4
Cereals				
Unsweetened cold cereal (not natural)	+9	+13	+10	+2
Pre-sweetened cold cereal	-1	-6	-1	+1
Oatmeal/other cooked cereals	+3	+14	-1	+1
Natural cereal	+3	+16	0	-10
Other Foods				
Rice	+2	+2	+3	+2
Pizza	-9	-16	-8	-4
Eggs	+20	+20	+20	+17
Cheese	+28	+29	+28	+24

*Base: Those who have served in past four weeks.

Q. 14 - For each type of food listed below, please indicate whether you buy more now, about the same, or buy less now for your household than a few years ago.

Analyzing the actual consumer of various products reveals that the presence of children has a strong relationship on adult consumption for spaghetti, macaroni and snack cakes. Donut consumption, however, is not affected.

Observations Related To White Bread

The following patterns are evident for white bread

- There is a strong relationship between consuming white bread and age, sex, income, region, size of family, one's perception about nutrition and one's interest in nutrition.

- Consumption of white bread is skewed heavily toward males across all age groups.

- Consumers with a low degree of interest in nutrition and those with a low self-perception of nutritional knowledge are more likely to eat white bread regularly vis-a-vis those who have a high concern.

- Consumption of white bread falls off as a person progresses from youth to adulthood and levels off at about 30% of the adult population at around age 34.

- An inverse relationship exists between income and adult consumption. That is, as income rises, the incidence of adults who say they consume white bread decreases.

Observations Pertaining To Spaghetti And Macaroni

- Spaghetti and macaroni show nearly identical patterns and relationships, including a strong relationship between family size, age and region. Nutritional concern or perception and income do not seriously affects adult consumption.

- Adults from larger households are more likely to consume spaghetti and macaroni.

- Consumption is greatest in the East and lowest in the West.

- Consumption of spaghetti and macaroni drops with age -- the opposite of white bread, which levels off.

Observations Pertaining To Snack Cakes/Donuts

- Snack cakes and donuts show similar relationships. Consumption is affected by age, sex, concern for nutrition and one's perception about nutrition.

- Snack cakes and donuts are predominately teen and pre-teen food products. Consumption drops to minimal levels at adulthood.

- The incidence of individual consumption for snack cakes is greater through 45 years of age for males than females; at 45 individual consumption among males and females is similar. For donuts, consumption is greater for males through age 55; after 55, consumption is similar to that of women.

- Adults who have a low concern for nutrition are more likely to consume snack cakes/donuts than those who have a high concern.

- Regionally, snack cakes are more likely to be consumed in the south.

By various Demographics

	White Bread	Spaghetti	Macaroni	Snack Cakes	Donuts
Total Sample	35%	23%	21%	5%	4%
Age Of Respondent					
Preteen	55	33	36	15	23
Teenagers	50	31	29	16	11
Adults	36	24	21	5	4
19 - 25	46	29	28	8	5
25 - 34	37	28	27	6	5
35 - 44	31	31	26	6	3
45 - 54	32	24	18	4	4
55 - 64	29	18	13	3	3
64 and over	30	9	7	2	2
Female Age					
Preteen	53	34	37	13	7
Teenagers	44	30	28	13	7
Adults	31	22	21	4	3
19 - 25	43	29	31	6	4
25 - 34	32	27	27	5	4
35 - 44	26	29	24	5	2
45 - 54	29	22	20	4	2
55 - 64	26	16	12	3	3
64 and over	29	9	8	2	2
Male Age					
Preteen	57	32	35	16	10
Teenagers	55	31	28	18	9
Adults	44	27	20	7	6
19 - 25	55	30	20	10	7
25 - 34	47	29	26	10	8
35 - 44	44	36	29	10	6
45 - 54	41	28	14	5	7
55 - 64	36	25	16	4	4
64 and over	35	9	5	1	3
Presence Of Children*					
Children	41	31	29	7	4
No children	30	18	15	4	4
Size Of Family*					
One	29	12	10	4	4
Two	31	18	15	4	4
Three to four	39	28	27	7	4
Five or more	41	38	29	6	4
Household Income*					
Under $10,000	41	22	22	7	6
$10,000 - $14,999	40	22	19	4	3
$15,000 - $19,999	36	21	20	6	3
$20,000 - $29,999	33	27	23	4	3
$30,000 or more	26	24	19	4	3
Geographic Region*					
East	38	32	26	4	4
North	37	20	18	4	4
South	37	24	22	8	4
West	24	18	16	4	3
Nutrition Concern*					
High	19	21	16	3	2
Medium	35	23	21	4	4
Low	47	27	23	8	4
Nutrition Perception*					
High	27	24	21	4	3
Medium	34	23	21	4	4
Low	52	27	23	9	5

*Based on adults who regularly eat.

Q. 38 - Please "X" the persons below that you have in your household. Then, for each one, "X" the box that indicates how frequently each person eats the products listed below.

The following portion looks at product usage and profiles those who frequently serve specific products within their households. The market definitions are based on who actually consumes the product vs. the demographics of the head-of-household who may or may not consume the product. The definitions of the target audience are similar.

Bread Incidence

Virtually all households (92%) served a bread product in their home during a four-week period. The breads served most often and in the most homes are white bread and wheat bread. Hamburger/hot dog buns and rolls are also popular bread items but are not served as frequently.

Bread Penetration And Frequency Of Use

	Served In Past Four Weeks	Served At Least Once A Day*
White bread	57%	49%
Wheat bread	46	36
Rolls	51	30
Hamburger/hot dog buns	51	24
Rye bread	28	21
Bagels	15	20
English muffins	34	19

*Base: Those who served product in past four weeks.

Changes In Consumption

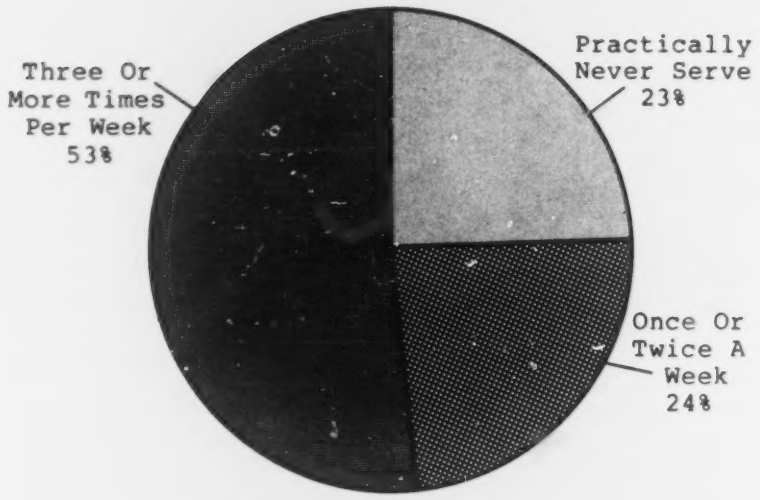
Respondents were asked to assess their current usage of bread vs. their usage in past years. With the exception of wheat bread, all bread products show a decline among users in the frequency of purchase. Rolls showed the greatest decline (-26%); while white bread, English muffins and bagels showed declines but not in the level of severity.

Shift In Product Purchasing
(Net Buy More/Buy Less Now)

	Product Net Shift
White bread	-4
Rye bread	-11
Wheat bread	+25
English muffins	-5
Bagels	-1
Rolls	-26
Hamburger/hot dog rolls	-18

The low frequency of regularly serving bread or rolls with the main meal contributes to the decline in purchasing rolls. Most consumers serve bread or rolls with the main meal at least three times per week; 24% serve it once or twice a week and 23% practically never serve it with the main meal.

Serve Roll Or Bread At Main Meal



Prime Prospects For Bread Products

Households that serve various bread products are described as follows:

White Bread

- Married.
- More likely to be under 45 years of age.
- Larger household with children under 18.
- Less likely to live in the West.

Wheat Bread

- Married.
- Higher income.
- More likely to live in a larger household with children under 18.
- More likely to live in the North and West.

English Muffin

- Married.
- 25 to 45 years of age.
- Upper income.
- Larger household with children under 18.
- More likely to live in East and West.
- More likely to be white.

Profile Of Frequent Users
Selected Bread Products

	Total Sample	White Bread %	White Bread Index	Wheat Bread %	Wheat Bread Index	English Muffin %	English Muffin Index
Age							
Under 25	18%	19%	106	17%	94	11%	61
25 - 34	23	23	100	24	104	24	104
35 - 44	15	17	113	16	107	21	140
45 - 54	14	15	107	15	107	16	114
55 - 64	14	13	93	12	86	14	100
65 and over	16	14	88	16	100	14	88
Household Size							
One to two	49	42	86	45	92	39	80
Three to four	39	41	105	40	103	43	110
Five or more	12	18	150	14	116	18	150
Children							
Children	42	48	114	44	105	48	114
No Children	58	52	90	56	97	52	90
Region							
East	21	22	105	16	76	34	162
North	28	30	107	31	111	25	89
South	34	34	100	32	94	21	62
West	17	14	82	21	124	20	118
Household Income							
Under $15,000	41	43	105	38	93	29	71
$15,000 - $19,999	14	13	93	14	100	15	107
$20,000 - $24,999	13	12	92	12	92	12	92
$25,000 - $29,999	10	9	90	11	110	14	140
$30,000 and over	22	22	100	24	109	30	136
Marital Status							
Married	74	78	105	76	103	80	108
Single	7	5	71	6	86	5	71
Divorced	9	9	100	8	89	7	78
Widowed	8	6	75	7	88	6	75

Reasons For Declining White Bread Consumption

A proprietary study which monitors food menu patterns indicates that, between 1972 and 1981, per capita consumption of bread and rolls declined 13%. Many factors, have affected overall consumption; e.g., the growth of away-from-home eating, changes in population composition, smaller families. These latter factors, external to the industry, can't effectively be dealt with by the milling, bakery and allied industries.

Because white bread represents a dominant portion of total bread sales, a special section in the study deals with consumer perceptions regarding this product with particular emphasis on possible reasons for declining consumption patterns.

Consumers were asked to indicate why they have avoided or reduced the amount of white bread they consume. The reasons mentioned fall into four broad areas:

Taste

- Preference for variety breads; white breads are gummy; more suitable for children; doesn't taste good by itself.

Nutrition

- White bread is seen as having little nutritional value; high in preservatives; it's junk food.

Health-Related

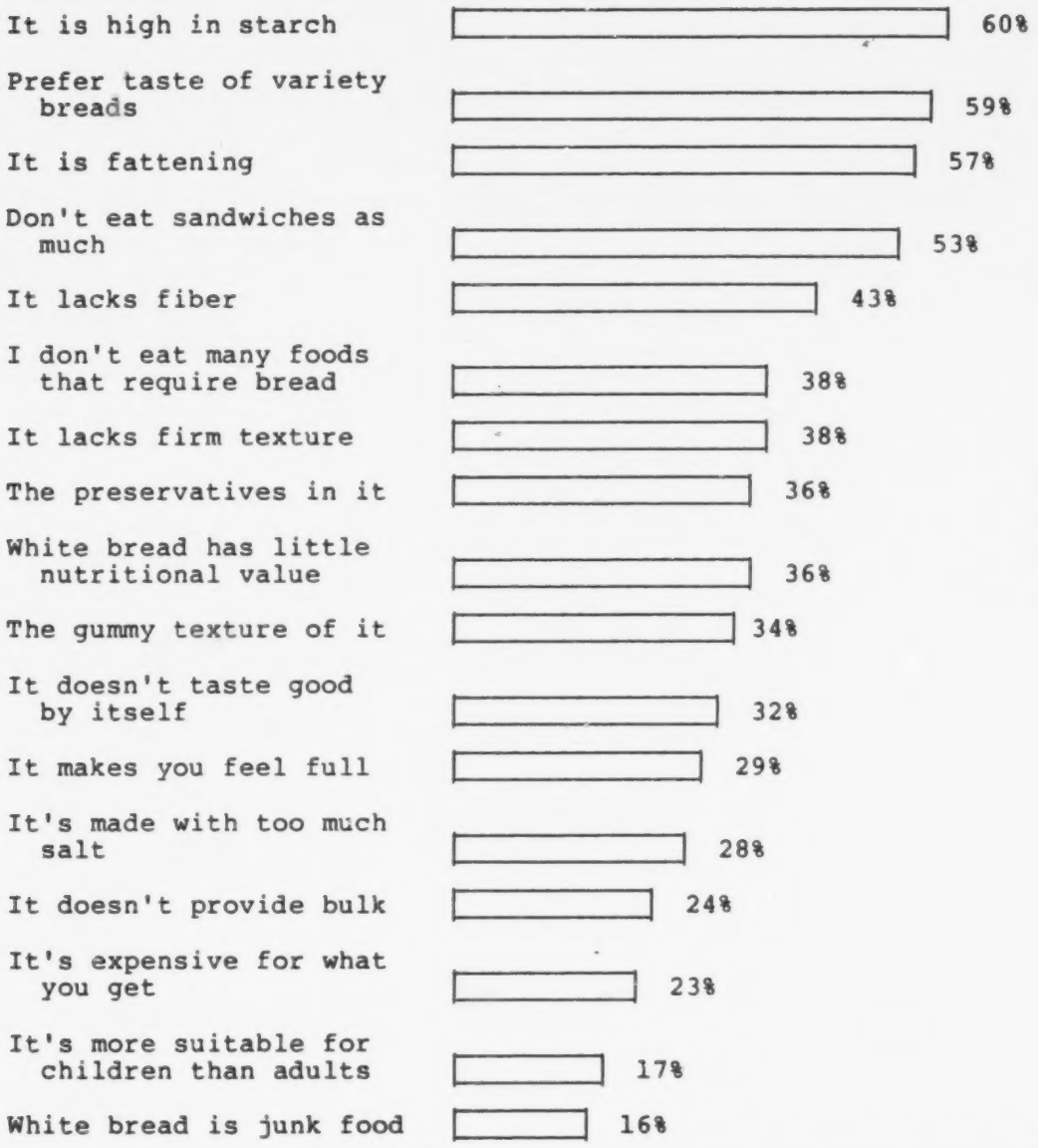
- Fattening; high in starch; makes you feel full; high in salt; lacks fiber; doesn't provide bulk.

Change In Eating Habits

- Don't eat as many sandwiches as before; don't eat foods which require bread.

These reasons correlate to the perceptions of white bread relative to the other foods.

Reasons Don't Eat/Avoid White Bread



Q. 32 - Now, think about white bread. Listed below are statements that some people have made about cutting back or tending to avoid eating white bread. Please "X" those statements that apply to <u>you, personally</u>.

Reasons given for avoiding or not eating white bread vary by consumer segments. For example, consumers who are very concerned with nutrition avoid bread for the following three reasons:

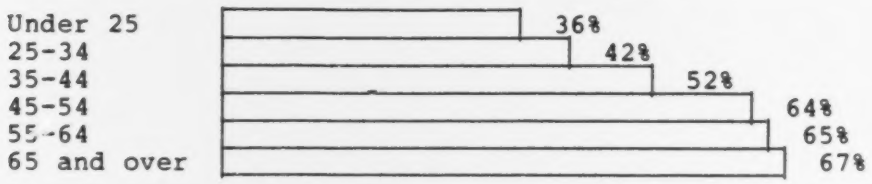
- o Prefer variety bread (75%).
- o It's high in starch (70%).
- o Lacks fiber (63%).

Consumers who are not as concerned with nutrition cite the following reasons (note the only common reason between these two segments is starch):

- o It's fattening (59%).
- o It's high in starch (51%).
- o Don't eat sandwiches as much (51%).

Analyzing the reasons for avoiding white bread by the various demographic groups shows reasons vary by income, region and age. The list shows the most meaningful reasons for cutting back on white bread use. For example, the tendency to use white bread decreases drastically with age.

Don't Eat Sandwiches As Much As Before



Don't Eat That Many Foods That Require White Bread

Among older consumers, other issues emerge: the concern for fiber and salt and a preference for a less-gummy product. These latter considerations all grow in importance with age.

Reasons For Avoiding White Bread

	Total Sample	Income: Under $10M	$10M-$15M	$15M-$20M	$20M-$30M	$30M Or More	Geographic Region: East	North	South	West	Age of Respondent: Under 25	25-34	35-44	45-54	54-64	65 & Over
Don't eat sandwiches as much as before	53%	49%	50%	45%	59%	58%	52%	54%	52%	52%	36%	42%	52%	64%	65%	67%
Prefer taste of variety breads	59	54	57	54	61	69	61	67	49	64	49	55	61	62	68	66
White bread has little nutritional value	36	33	33	30	40	39	37	35	29	48	42	34	33	37	33	34
White bread is junk food	16	13	14	13	21	16	13	17	11	26	20	16	15	16	14	13
It is fattening	57	55	61	59	57	55	52	55	61	58	61	55	55	57	55	58
It is high in starch	60	55	63	63	65	59	58	59	60	65	52	57	58	62	67	69
The gummy texture of it	34	29	34	32	35	40	34	32	30	44	23	27	30	37	43	49
It's expensive for what you get	23	29	23	20	23	20	29	18	24	23	21	18	21	24	21	36
I don't eat many foods that require bread	38	34	37	34	42	44	37	41	37	37	24	32	42	44	47	48
The preservatives in it	36	32	34	37	38	41	40	36	27	51	34	34	36	41	39	37
It's more suitable for children than adults	17	25	16	12	16	13	15	17	20	15	22	16	15	10	19	19
It lacks fiber	43	41	42	43	45	46	42	45	38	54	38	33	39	48	50	59
It doesn't taste good by itself	32	32	34	29	37	31	34	38	26	33	29	32	34	25	36	39
It doesn't provide bulk	24	22	25	25	27	23	27	24	21	28	16	19	26	26	28	35
It makes me feel full	29	33	27	27	33	23	26	28	30	32	31	27	24	30	31	33
It's made with too much salt	28	25	26	26	33	28	34	23	23	37	22	23	28	32	32	32
It lacks firm texture	38	35	37	40	38	41	39	39	32	46	32	32	36	42	41	49

Q. 32 - Now, think about white bread. Listed below are statements that some people have made about cutting back or tending to avoid eating white bread. Please "X" those statements that apply to you, personally.

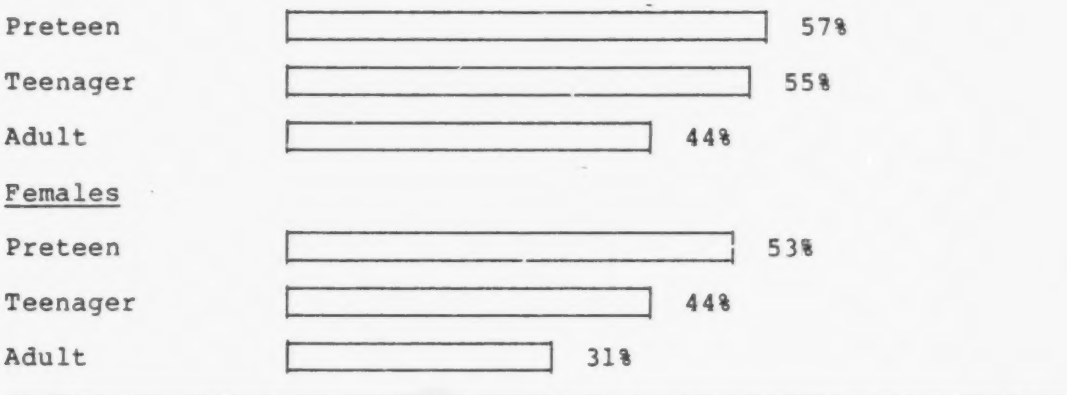
Reasons For Avoiding/Cutting Back On White Bread Consumption

Base:	Total (3366)	Sex: Male (957)	Sex: Female (2411)	Serve Frequently	Not Served Frequently	Concern For Nutrition: High	Concern For Nutrition: Medium	Concern For Nutrition: Low
It is high in starch	60%	55%	62%	61%	61%	70%	61%	52%
Prefer taste of variety breads	59	57	60	52	67	75	60	47
It is fattening	57	52	59	53	59	62	55	59
Don't eat sandwiches as much	53	40	57	53	51	59	51	51
It lacks fiber	43	44	43	36	51	63	40	37
I don't eat many foods that require bread	38	27	43	38	39	44	37	37
It lacks firm texture	38	38	38	34	44	52	36	33
The preservatives in it	36	36	37	28	45	51	36	27
White bread has little nutritional value	36	37	35	30	43	48	36	27
The gummy texture of it	34	35	33	28	40	47	32	30
It doesn't taste good by itself	32	34	32	28	37	40	32	28
It makes you feel full	29	21	32	31	27	30	28	33
It's made with too much salt	28	31	27	22	31	45	25	21
It doesn't provide bulk	24	22	25	19	30	41	23	14
It's expensive for what you get	23	24	23	23	26	30	22	22
It's more suitable for children than adults	17	14	18	16	15	15	18	17
White bread is junk food	16	17	15	7	25	30	12	14

Q. 32. Now, think about white bread. Listed below are statements that some people have made about cutting back or tending to avoid eating white bread. Please "X" those statements that apply to you, personally.

As shown below, consumption of white bread within households is skewed heavily toward the males. This reflects the concern of many women controling calories by skipping meals, not eating foods seen high in calories, etc.

Individual Consumption of White Bread
Person in Household Who Regularly Eats



The Freshness Problem

Nearly one out of three consumers report having to throw out white bread at least once a month.

Frequency Of Throwing Out White Bread
Because It's Gone Stale

Base: White bread buyers	Total Sample Who Serve White Bread (1877)	Serve White Bread Freq. (1293)	Serve White Bread Occas. (146)
Frequency			
Several times a week	1%	2%	3%
About once a week	12	13	11
2-3 times a month	10	10	12
About once a month	12	11	14
Throw out once a month or more (net)	35	36	40
Less often than once a month/practically never	64	64	60

Q. 35 - Which statement below best describes how frequently you throw out white bread because it has gone stale before you finish the loaf?

The reasons bread goes stale before being consumed relate to consumption affected by such factors as:

- Decrease in consumption of sandwiches by adults.
- Increase in eating out.
- Limited serving of bread along with main meal.

Serve Bread/Rolls With Main Meal

Base:	Total (3366)	Total Sample Who Serve White Bread (1905)	Serve White Bread Freq. (1303)	Serve White Bread Occas. (154)
Frequency				
Practically never	23%	19%	17%	33%
Once a week	13	12	13	11
Twice a week	11	11	11	12
Three times a week	10	10	11	5
Four times a week	7	7	7	5
Five times a week	5	6	5	8
Six times a week	4	4	5	2
Seven times a week	27	30	31	24

Q. 6b - Approximately how many days a week, on the average, do you serve bread or rolls along with the main meal?

Storage

When consumers are asked what they do when they purchase more than one loaf of white bread at a time, consumers indicate they freeze the bread and then take out a loaf as needed. A minority (19%) of those who freeze bread take a slice at a time. Regardless of whether the consumer takes a slice or a loaf, the net result is the same: product quality deteriorates from the consumers' perspective.

Not surprisingly the consumer who uses bread less frequently is more likely to freeze bread, more likely to take a slice as needed and more likely to say the product is not as good or fresh.

Behavior With White Bread Storage

Base: Buy more than a loaf at a time	Total Sample Who Serve White Bread	Serve White Bread Freq.	Serve White Bread Occas.
What Do With Extra Bread			
Freeze	86%	85%	89%
Put in refrigerator	9	10	9
Put in bread box	5	5	2
Use Pattern If Freeze			
Take out whole loaf	81	83	67
Take out number of slices needed	19	17	30
Quality If Freeze			
Just as good as fresh	43	44	41
Almost as good as fresh	38	37	44
Not as good as fresh	14	15	10
Nowhere near as good as fresh	3	3	4

*Base: Those that freeze white bread. Table excludes No Answer.

Q. 36a - When you buy more than one loaf of white bread at a time, what do you do with the loaves you won't be using immediately?

Q. 36b - When you take frozen white bread out of the freezer, do you take out a whole loaf at a time or do you just take out the number of slices you need?

Q. 36c - When you use white bread that has been frozen, do you feel the defrosted bread is ...?

Pasta Incidence

Overall, 80% of those surveyed reported serving either packaged egg noodles, spaghetti or macaroni in their homes during a four-week period. Few consumers make their own fresh pasta or purchase fresh pasta at supermarkets.

Pasta Penetration And Frequency Of Use

	Product		
	Spaghetti	Macaroni	Egg Noodles
Base:	(3366)	(3366)	(3366)
Measure			
Served product in past 4 weeks	58%	59%	48%
Served at least once a week	37	40	41

With the exception of egg noodles, consumers report no real changes in the purchase of these products compared to a few years ago.

Pasta Products
Shift In Product Purchasing

	Product		
	Spaghetti	Macaroni	Egg Noodles
Buy more now	20%	20%	15%
Buy less now	21	22	26
Net change	(1)	(2)	(11)

Pasta Usage

Although the pasta products are seen as quite similar in terms of their various attributes; e.g., calorie levels, ingredients, nutritional value and use in place of potatoes and rice -- they are served quite differently:

- Macaroni is used primarily as an ingredient for casseroles (70%) and is served both hot and cold as a main dish (46%) or side dish (47%).

- Spaghetti is primarily served hot as a main dish (80%) and is not seen as versatile as macaroni.

- Egg noodles are primarily used as an ingredient in casseroles (64%) and soups (50%). Other uses are limited.

Prime Prospect For Macaroni

The primary market of households serving macaroni most often can be characterized as follows:

- Married.

- More likely to be under 45 years of age.

- At least one child under 18 years of age living at home.

- Less likely to live in the West.

Prime Prospect For Spaghetti

The primary market for spaghetti can be described as similar to that of the macaroni prospect, that is:

- Married.
- Under 54 years of age.
- At least one child at home under 18.
- More likely to live in the East. This is somewhat different than the macaroni user, who tends to come from all regions, except the West.

Egg Noodle Prospect

The egg noodle prospect is:

- Married.
- Over 25.
- Children living at home.
- More likely to live in the East.
- More likely to be white.

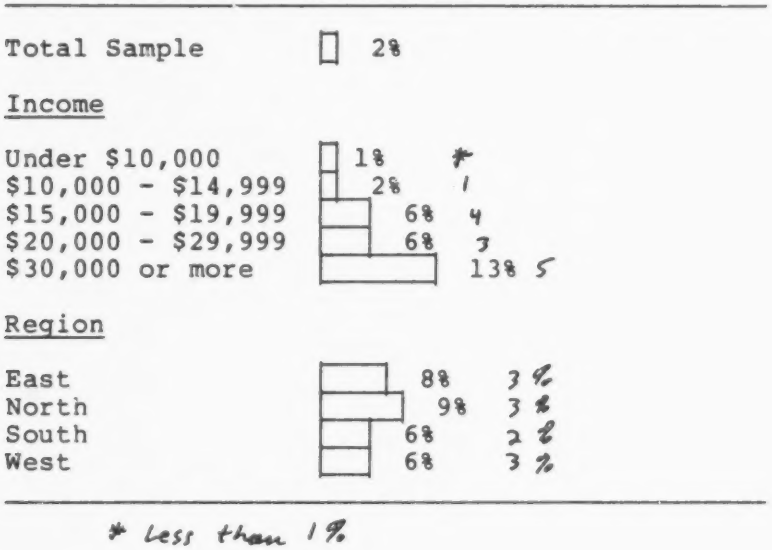
Profile Of Frequent User
Selected Pasta Products

	Total Sample	Frequent User Of: Spaghetti %	Spaghetti Index	Macaroni %	Macaroni Index	Egg Noodles %	Egg Noodles Index
Age							
Under 25	18%	22%	122	19%	106	13%	72
25 - 34	23	24	104	26	113	25	109
35 - 44	15	19	127	18	120	15	100
45 - 54	14	14	100	14	100	16	114
55 - 64	14	11	79	11	79	15	107
65 and over	16	11	69	12	75	16	100
Household Size							
One to two	49	37	76	39	80	42	86
Three to four	39	44	113	43	110	39	100
Five or more	12	19	158	17	142	18	150
Children							
Children	42	52	124	52	124	46	110
No Children	58	48	83	48	83	54	93
Region							
East	21	29	138	22	105	21	100
North	28	25	89	29	104	35	125
South	34	31	91	35	103	27	79
West	17	15	88	14	82	17	100
Household Income							
Under $15,000	41	43	105	43	105	38	93
$15,000 - $19,999	14	12	86	13	93	14	100
$20,000 - $24,999	13	13	100	14	108	14	108
$25,000 - $29,999	10	9	90	10	100	11	110
$30,000 and over	22	23	105	20	91	24	109
Marital Status							
Married	74	80	108	80	108	80	108
Single	7	5	71	3	43	3	43
Divorced	9	9	100	9	100	8	89
Widowed	8	5	63	6	75	7	88

Ownership Of Pasta-Making Machine

Very few (2%) consumers own a pasta-making machine. Predictably for a highly specialized kitchen appliance, income shows a strong relationship to ownership; pasta appliances are most frequent among those with incomes of $30,000 or more. This declines significantly among those with incomes under $15,000.

Own Pasta-Making Machine



* Less than 1%

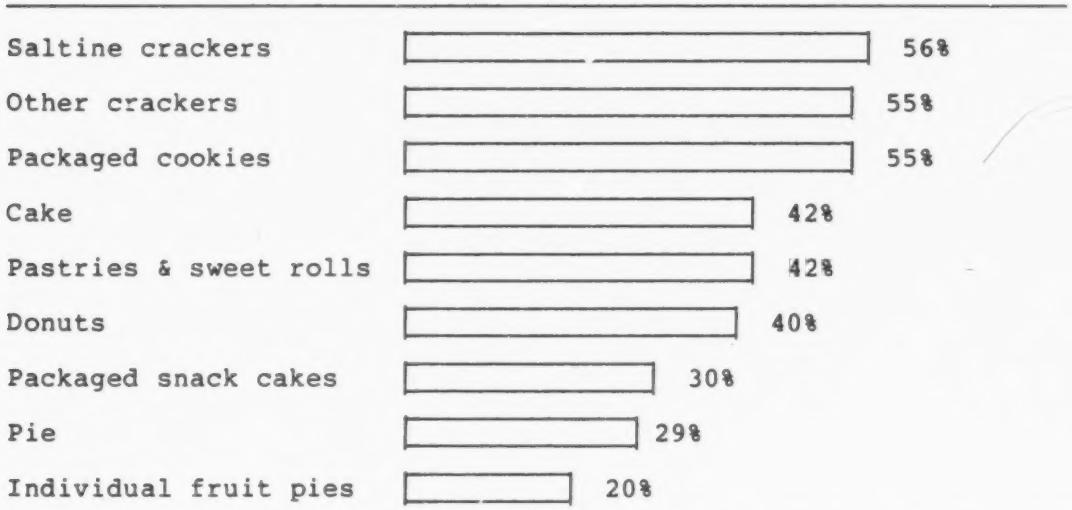
Among those few consumers who own a fresh pasta machine, usage is quite limited. Typically, the majority of consumers (60%) use the pasta machines less than once a month; only 12% report using the equipment at least every two weeks.

Wheat-Based Sweet Goods Incidence

The overall incidence of serving any wheat-based sweet good/ snack was 90% during a four-week period.

An examination of what sweet goods are served shows that the most frequently served sweet goods were packaged cookies (55%), cakes (42%), pastries and sweet rolls (42%) and donuts (40%). The incidence of serving packaged individual snack cakes was 30%, 20% for individual fruit pies.

Wheat-Based Sweet Goods/Snacks Incidence
Served During Four-Week Period



It appears there has been a major decline in the purchase of all wheat-based sweet goods and snacks in spite of increased snacking between meals and before bedtime. In contrast, fresh fruit and vegetables, which many consumers report they are serving in place of donuts, individual fruit pies, and snack cakes, show an increase in purchasing. Within the wheat-based snack category, crackers, cookies and snack cakes show the smallest decline in purchase frequency. In contrast, pastries, pies (whole and individual), cake, donuts and snack cakes show major declines in frequency of purchase.

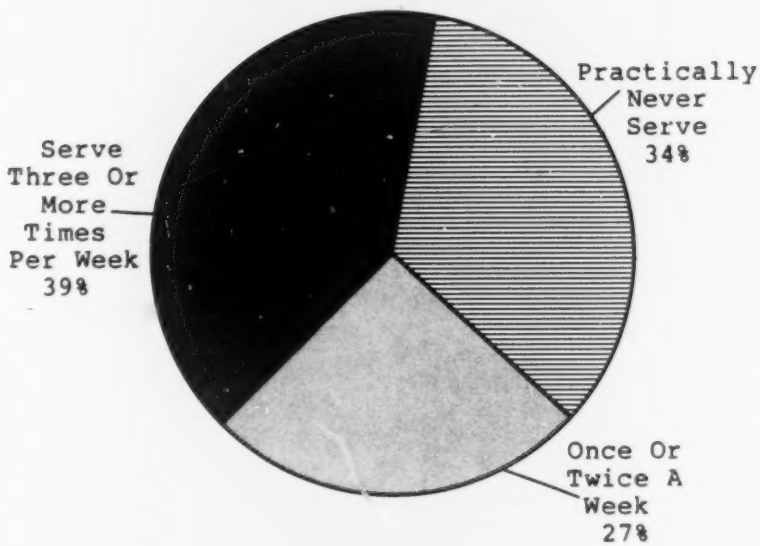
Wheat-based Sweet Goods
Shift In Product Purchasing
(Net Buy More/Buy Less Now)

Pie	-46
Pastries & sweet rolls	-41
Individual fruit pies	-40
Cake	-39
Donuts	-32
Packaged snack cakes	-19
Packaged cookies	-12
Other crackers	-6
Saltine crackers	-2
Fresh vegetables (except potatoes)	+24
Fresh fruit	+44

Usage

One factor contributing to the decline of wheat based sweet good consumption is the low frequency of serving desserts with the main meal. Most consumers (66%) indicated they serve dessert with the main meal at least once a week and 20% report they serve dessert with the main meal at least five or more times. In contrast, one out of three consumers practically never serve a dessert with the main meal. Combining those who serve dessert infrequently (once or twice a week) with those who say they rarely serve dessert with the main meal shows the majority of households do not serve desserts with their main meal with any regularity.

Proportion Who Serve Dessert With Main Meal



Regionally, desserts are served more frequently in the East and consumers in the West are more likely not to serve dessert with the main meal.

The popularity of desserts is highest among those who are 65 and over. Among the elderly segment, 42% report serving a dessert with the main meal at least five or more times per week. In contrast, the incidence of serving desserts at least five times per week among consumers under 45 is only 11%. Consistent with this pattern, consumers under 45 are more likely to say they practically never serve a dessert with the main meal (42%) in contrast to those over 65 years of age (21%).

Times Per Week Dessert Served With Main Meal

		Marital Status					Type Of Family	
			Separated Widowed/	Married			Children	No
	Total	Single	Divorced	Total	Spouse Unemployed	Both Employed	Under 18	Children
Base	(3366)	(223)	(644)	(2490)	(443)	(1213)	(1394)	(1740)
Practically never	34%	42%	37%	32%	24%	34%	34%	33%
Once a week	16	22	13	16	12	18	18	13
Twice a week	11	9	10	12	12	13	12	11
Three times a week	11	8	11	11	13	10	11	11
Four times a week	7	5	7	7	8	7	8	7
Five times a week	6	5	6	7	6	6	6	7
Six times a week	3	2	2	4	6	3	3	4
Seven times a week	11	7	12	11	19	9	7	15

	Size Of Family				Age Of Respondent						Geographic Region			
	One	Two	Three Or Four	Five Or More	Under 25	25-34	35-44	45-54	55-64	65 & Over	East	North	South	Wes
Base	(525)	(1109)	(1313)	(419)	(605)	(762)	(521)	(470)	(469)	(540)	(701)	(937)	(1145)	(585
Practically never	38%	34%	34%	28%	43%	38%	40%	31%	27%	21%	32%	33%	34%	39
Once a week	15	13	18	17	19	19	18	14	13	9	13	15	18	15
Twice a week	9	10	13	12	11	12	10	14	11	10	12	11	12	11
Three times a week	8	12	10	12	11	12	10	10	9	10	9	11	12	10
Four times a week	7	7	8	8	5	5	9	7	10	8	9	7	6	6
Five times a week	7	6	6	8	5	5	4	9	9	9	7	8	5	6
Six times a week	2	4	3	4	1	3	3	3	5	6	4	3	3	4
Seven times a week	13	13	9	10	5	6	6	11	15	27	14	11	10	9

Household Profile Of Wheat-Based Sweet Goods

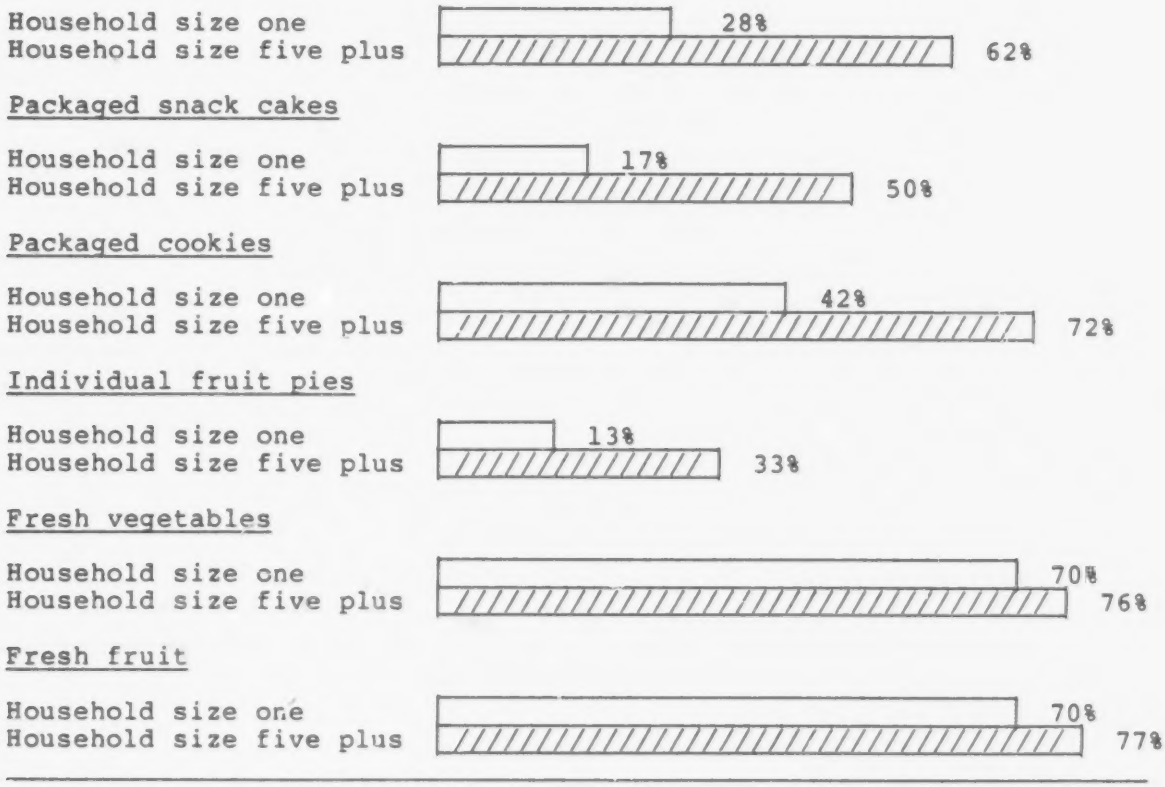
The incidence of serving specific packaged sweet goods shows the effect of marital status, age and children. The incidence of serving packaged desserts/snacks is significantly higher within households containing children under 18.

In contrast, family size has only limited effects on serving fresh vegetables or fruit.

Packaged sweet goods are more popular, based on the reported incidence of serving, in the East and South and least popular in the West.

The frequency of serving sweet desserts/snacks is typically greater in households of three or more. The latter obviously reflects the influence of children who are heavy consumers of these products. Similar patterns are evident when results are analyzed by specific products.

Incidence Of Serving In Past Four Weeks By Household Size



Primary Prospect For Donuts/Snack Cakes

In looking at the frequent buyers of snack cakes and donuts, the primary prospect can be summarized as follows:

- Married.
- More likely to be between 25 and 54 years of age.
- One or more children under 18 living at home.

Snack cake prospects are more likely to live in the East and South and least likely to live in the West.

Donut prospects are more likely to live in the East and less likely to live in the West.

The household income of these prospects is $15,000 or more.

Individual Fruit Pies

The prospect for individual fruit pies provides a somewhat different profile than the prospect for snack cakes or donuts. The notable differences are age, income and family size.

The prospect is married, with children, but is more likely to be under 45 years of age, more apt to have a larger family, have an income of under $30,000 and live in the South.

Profile Of Frequent Users
Selected Wheat-Based Sweet Goods

	Total Sample	Snack Cakes %	Snack Cakes Index	Donuts %	Donuts Index	Individual Fruit Pies %	Individual Fruit Pies Index
Age							
Under 25	18%	17%	94	14%	78	23%	128
25 - 34	23	30	130	27	117	32	139
35 - 44	15	22	147	21	140	19	127
45 - 54	14	15	107	15	107	13	93
55 - 64	14	9	64	12	86	5	36
65 and over	16	7	44	11	69	7	44
Household Size							
One to two	49	29	59	32	65	25	51
Three to four	39	48	123	48	123	50	128
Five or more	12	23	192	20	167	25	208
Children							
Children	42	63	150	56	133	67	160
No Children	58	37	64	44	76	33	57
Region							
East	21	24	114	26	124	22	105
North	28	25	89	26	93	25	89
South	34	40	118	33	97	43	126
West	17	10	59	15	88	10	59
Household Income							
Under $15,000	41	37	90	35	85	40	98
$15,000 - $19,999	14	15	107	15	107	13	93
$20,000 - $24,999	13	16	123	13	100	15	115
$25,000 - $29,999	10	12	120	13	130	13	130
$30,000 and over	22	21	95	24	109	18	82
Marital Status							
Married	74	83	112	82	111	82	111
Single	7	4	57	4	57	3	43
Divorced	9	7	78	8	89	9	100
Widowed	9	4	44	3	33	5	56

Reasons For Declining Wheat-Based Sweet Good Consumption

To provide additional insight into reasons contributing to declining consumption of packaged ready-to-eat wheat-based sweet goods, 1135 consumers were asked a series of additional questions concerning perceptions and usage, different from those in Section II, "How the Consumer Perceives Different Foods." The products investigated were individual ready-to-eat fruit pies, packaged donuts and individual ready-to-eat snack cakes.

The reasons consumers avoid these products relates directly to earlier observations of these products being seen as "junk food;" that is, they are seen as having no or little nutritional value, high in sugar and starch, fattening and containing empty calories. Preservatives are seen as a major ingredient and their main reason for being is that they are a convenient snack which children enjoy.

The net result is that many report they serve more fresh vegetables and fruit as an alternative snack. This is especially true among those who have a high concern for nutrition.

Reasons For Avoiding
Wheat-Based Sweet Goods

	Product		
Base	Individual Fruit Pies (1135)	Packaged Donuts (1135)	Packaged Snack Cakes (1135)
Reason For Avoiding			
Fattening	79	86	86
Serving more fresh fruit as snacks	63	55	60
Too expensive	59	55	61
Empty calories	48	54	56
Ruins family appetite	47	50	53
Serving more vegetables as snacks	34	33	36
Cookies are less expensive	34	31	36
Liked only by children	10	10	15

Q. 32 - Listed below are reasons some people may have for cutting back or tending to avoid buying packaged snack cakes, packaged donuts with a hole in the center and individual fruit pies. Please "X" those statements that apply to you, personally.

Reasons For Avoiding Wheat-based Sweet Goods

Reason	Packaged Snack Cakes Concern For Nutrition			Individual Fruit Pies Concern For Nutrition			Packaged Donuts Concern For Nutrition		
	High	Medium	Low	High	Medium	Low	High	Medium	Low
Fattening	84%	81%	72%	88%	88%	79%	88%	88%	80%
Serving more fresh fruits as snacks	67	65	47	66	61	53	62	56	47
Empty calories	62	49	33	68	58	40	68	57	39
Too expensive	61	60	56	60	63	59	59	54	52
Ruins family appetite	55	47	40	61	53	49	58	49	44
Serving more vegetables as snacks	50	32	27	52	34	29	49	30	27
Cookies are less expensive	36	31		37	38	30	33	33	25
Liked only by children	12	9	9	18	15	13	13	10	8

Q. 32 - Listed below are reasons some people may have for cutting back or tending to avoid buying packaged snack cakes, packaged donuts with a hole in the center and individual fruit pies. Please "X" those statements that apply to you, personally.

SECTION V

BEHAVIOR AND ATTITUDE TOWARD ONE'S WELL BEING

This section of the study reports on consumer perceptions about their health and general diet habits. In particular it looks at different diets consumers are following for either medical or weight control or loss and behavioral activities related to food, nutrition and dieting.

Concerns Of Consumers

One of the striking observations throughout the study is the attitude, behavior and beliefs about nutrition vis-a-vis other considerations. As noted in Section I on shopping habits, more attention was paid to dating of bakery items than to the nutritional or ingredient information.

Similarly, when consumers were asked to assess their level of concern with over 30 different issues, the major concerns overall were making sure that foods you buy in the supermarket are fresh (57%) and taking care of one's teeth (56%). Concern about eating a balanced diet was cited by only 39%. Concern with one's weight (45%) and eating too much sugar (45%) and salt (45%) are the second areas of concern, followed by having time to relax (39%), rest (39%) or time to exercise (36%).

Few consumers have any real concern with:

(a) Eating only natural foods (9%).

(b) Increasing carbohydrates in the diet (10%).

(c) Getting enough carbohydrates in diet (10%).

(d) Serving foods which take too long to cook (11%).

(e) Checking the nutrient content of foods (15%).

Analysis of the various segments shows:

- Women consistently show a greater concern for nutrition, health and shopping considerations pertaining to food than men and are more likely to be concerned with having time to rest, relax and exercise.

- The most notable difference between non-white and white women is that non-white women show a greater concern for problems centering around time than white women -- time to relax, time to exercise, time to rest.

- Among consumers with a high interest in nutrition, the concerns present a different pattern from consumers who have a low nutritional interest. Specifically, we find people are concerned about their diet at nearly

the same level as they are concerned with buying fresh foods. They're also extremely concerned with all aspects of good eating habits; e.g., getting more fiber, eating food that keeps you regular, avoiding food with nitrates, eating too much fat. These results are consistent with patterns of responses to other questions throughout the study.

- Predictably, a number of areas become more important to consumers as they progress from middle age to elderly. The following issues are those areas where at least 25% of the elderly segment indicated they are concerned. Their concern is greater than that of the middle-age-and-younger segments.

  <u>Concern For Daily Eating Pattern</u>

  Eating a balanced diet.

  Eating an adequate breakfast.

  Eating three meals a day.

  <u>Avoidance Of Specific Foods</u>

  Eating too much fat.

  Eating too much meat.

  Using too much salt.

  Drinking too much coffee.

  Eating foods high in starch.

Regularity

Getting enough fiber in diet.

Eating foods that keep you regular.

Weight Control

Sticking to diet.

Staying away from snacks.

- The concern for cholesterol and eating foods with nitrate increases with age. The former is consistent with other data reported in the study.

- Four areas registered a high degree of concern with younger respondents. These concerns diminish until middle age, when they increase again as the respondent ages. These are:
  - Being able to relax.
  - Getting enough rest.
  - Making sure food you buy is fresh.
  - Drinking enough milk.

Concern About Nutrition And Views About Important Health Issues
Proportion With High Concern

	Total Sample	Interest In Nutrition		
		High	Medium	Low
Base:	3368	673	1886	773
Making sure that the food you buy in the supermarket is fresh	57	68	56	51
Taking proper care of your teeth	56	68	55	49
Eating too much sugar	45	65	45	31
Maintaining the right weight	45	59	44	37
Using too much salt (sodium)	43	54	43	31
Eating a balanced diet	39	61	37	26
Being able to relax	39	50	37	36
Getting enough rest	39	47	38	36
Eating too much fat	38	55	36	26
Smoking too much	37	41	37	32
Getting enough exercise	36	50	35	28
Staying away from snacks	29	41	26	23
Eating foods that keep you regular	29	44	27	20
Drinking too much alcohol	28	33	28	25
Preparing low cost meals for my family	28	31	28	24
Hyperactivity in my children	26	33	26	22
Eating an adequate breakfast	26	39	24	21
Drinking too much coffee	26	34	25	21
Eating foods high in cholesterol	25	39	24	15
Eating three meals a day	24	33	22	20
Getting enough fiber in the diet	24	40	21	15
Eating foods high in starch	24	34	22	17
Sticking to a diet	23	34	21	18
Drinking enough milk	22	29	21	19
Eating food from fast food restaurants too frequently	18	29	17	12
Eating too much meat	18	31	16	10
Eating foods with nitrates/ nitrites	17	35	15	8
Serving prepared foods in place of home-cooked	16	24	14	12
Checking the nutrient content of foods before you buy them	15	45	10	3
Serving foods that don't take too long to cook	11	14	10	13
Getting enough carbohydrates	10	20	9	5
Increasing carbohydrates in my diet	10	18	9	6
Eating only natural foods	9	19	6	4

Q. 39 - People have many different health and diet concerns. Will you please look at the list below and indicate how much you are concerned these days about <u>each</u> item listed. For each one, please circle one of the six numbers to show how much you're concerned. The <u>lower</u> the number, the <u>less</u> you are concerned. The <u>higher</u> the number, the <u>more</u> you are concerned.

Concern About Nutrition And Views About Important Health Issues
Proportion With High Concern

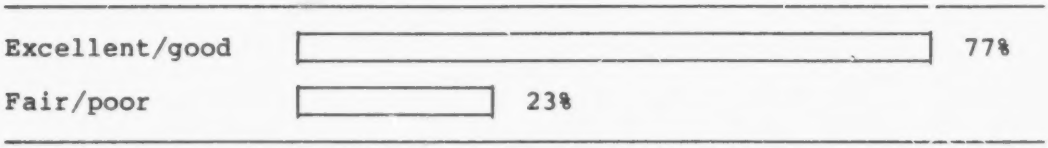
	Total Sample	Age Of Respondent						Sex Of Respondent			
									Female		
Base:	1368	Under 25	25-34	35-44	45-54	55-64	65 & Over	Male	Total	White	Non-White
Making sure that the food you buy in the supermarket is fresh	57%	59%	55%	50%	54%	62%	64%	50%	60%	59%	64%
Taking proper care of your teeth	56	57	58	53	53	58	57	47	60	59	64
Eating too much sugar	45	40	46	43	43	53	48	39	48	48	51
Maintaining the right weight	45	43	44	44	47	51	47	38	49	47	57
Using too much salt (sodium)	43	37	35	36	44	55	54	38	45	43	50
Eating a balanced diet	39	32	36	34	39	47	51	30	43	42	48
Being able to relax	39	40	37	33	41	45	43	36	41	39	49
Getting enough rest	39	42	37	30	37	43	45	34	41	39	53
Eating too much fat	38	30	29	31	39	49	55	31	40	40	44
Smoking too much	37	38	35	36	34	39	39	35	38	37	40
Getting enough exercise	36	39	34	33	36	40	36	31	38	36	47
Staying away from snacks	29	23	25	26	31	36	34	22	31	30	36
Eating foods that keep you regular	29	20	21	22	28	41	47	22	32	31	36
Drinking too much alcohol	28	30	24	25	24	31	35	26	29	29	30
Preparing low cost meals for my family	28	30	30	26	27	28	24	22	30	30	32
Hyperactivity in my children	26	29	28	26	22	29	22	23	27	26	34
Eating an adequate breakfast	26	20	19	18	27	35	43	24	27	27	25
Drinking too much coffee	26	23	21	21	25	34	33	24	26	26	28
Eating foods high in cholesterol	25	11	16	19	31	38	42	22	26	26	24
Eating three meals a day	24	19	20	16	22	30	39	21	25	25	26
Getting enough fiber in the diet	24	14	15	17	28	37	37	18	26	26	27
Eating foods high in starch	24	15	17	19	25	36	35	18	26	25	30
Sticking to a diet	23	17	23	22	28	27	23	16	26	24	33
Drinking enough milk	22	24	22	14	18	23	28	18	23	23	24
Eating food from fast food restaurants too frequently	18	13	17	16	17	23	25	16	19	18	24
Eating too much meat	18	12	13	15	18	27	25	15	19	18	25
Eating foods with nitrates/ nitrites	17	7	13	17	18	26	26	16	18	17	18
Serving prepared foods in place of home-cooked	16	13	11	14	17	19	22	12	17	16	20
Checking the nutrient content of foods before you buy them	15	10	15	14	14	19	22	12	17	16	21
Serving foods that don't take too long to cook	11	12	10	11	10	12	13	8	13	12	18
Getting enough carbohydrates	10	6	7	7	9	16	18	9	11	10	15
Increasing carbohydrates in my diet	10	5	6	11	10	18	15	8	11	10	15
Eating only natural foods	9	8	7	6	8	10	12	7	9	18	14

Q. 39 - People have many different health and diet concerns. Will you please look at the list below and indicate how much you are concerned these days about each item listed. For each one, please circle one of the six numbers to show how much you're concerned. The lower the number, the less you are concerned. The higher the number, the more you are concerned.

Health Status

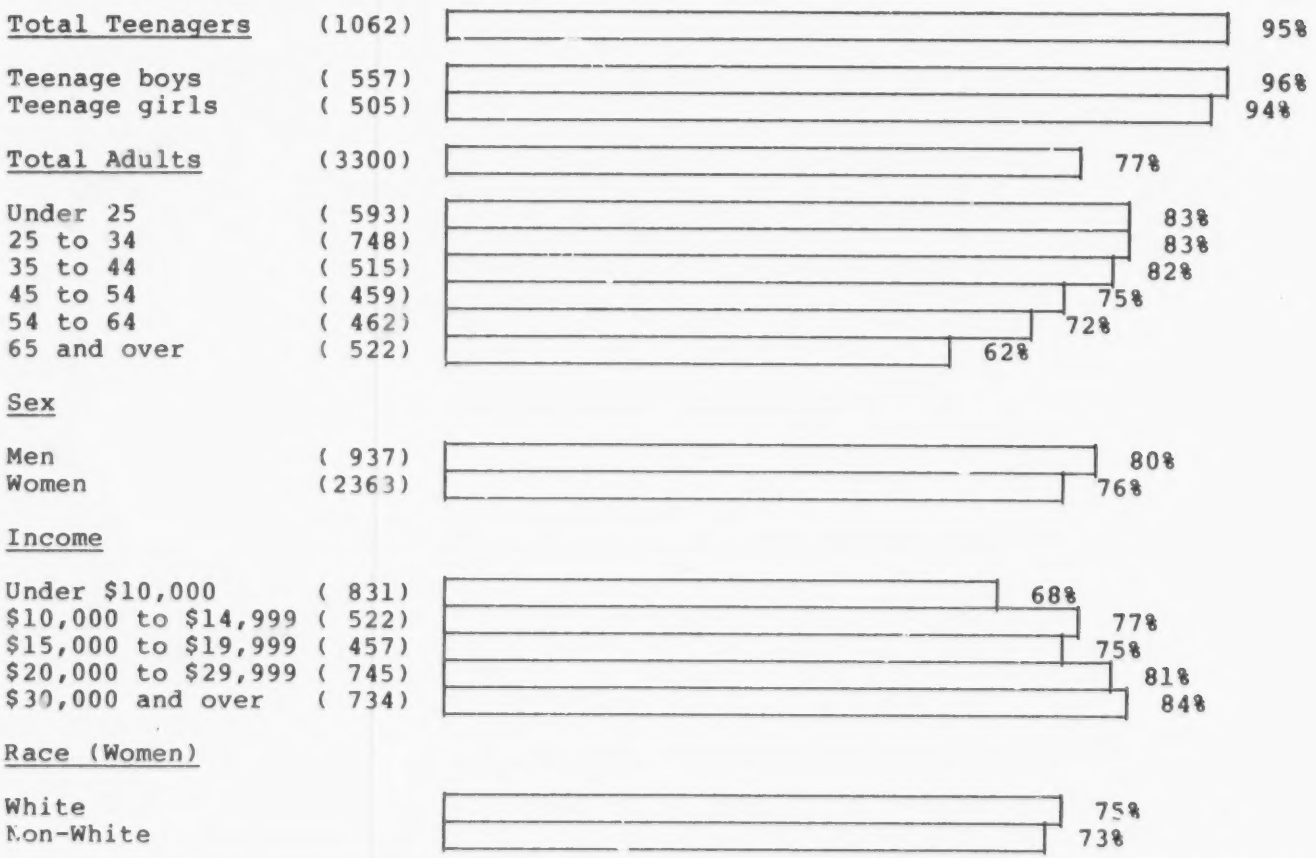
About three out of four consumers describe their current health as either good or excellent. The remaining one in four describes his/her health as fair or poor.

Health Status



One's health status is primarily related to age and to a lesser degree, income. Adults' perceptions of their teenage sons' and daughters' health shows that nearly all teenagers are described as being in either excellent or good health.

Proportion Of Population Describe Health Good/Excellent



Q. 48 - Which one of the statements below best describes this person's health?

Diet Status

Respondents were asked if they were on a diet for medical, weight loss, complexion or any other reason.

While many consumers (41%) are on a diet for one reason or another, the majority of consumers (59%) are not on any specific diet. Weight-loss dieting is more prevalent among women and weight gain is more prevalent among men.

Proportion Of Adults On Specific Diets By Sex

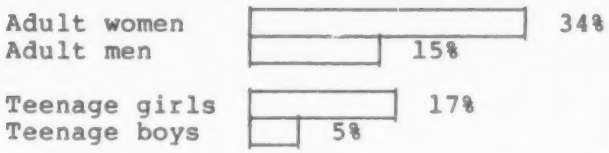
	Total	Sex	
	Sample	Male	Female
Base	(3172)	(912)	(2260)
Not On A Particular Diet	59%	73%	53%
Total On A Particular Diet	41	27	47
Medical	9	8	9
Complexion	1	*	1
Weight gain	1	2	*
Weight loss	28	15	34
Other	2	2	3

*Less than 1%.

Q. 52 - Which statement best describes this person's overall diet?

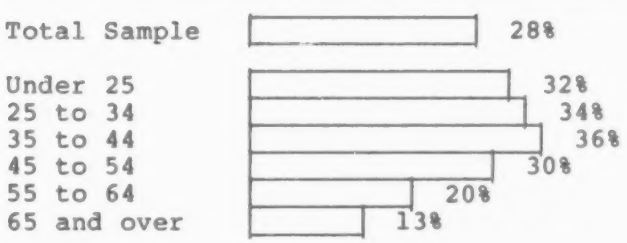
Weight loss becomes a factor in one's formative years as teenage girls are three times more likely to be on a weight-loss diet than teenage boys.

Proportion Of Sample
Reported On Weight-Loss Diet



Dieting for weight loss tends to be higher among middle and upper income households, where both adults work and where children under 18 are present. In particular, dieting for weight loss is primarily among those under 45. After the age of 45, the percentage of people dieting diminishes directly with age. Regionally, the reported level of Americans on a weight loss diet is highest in the East and lowest in the West.

Proportion Of Population Who Reported
To Be On A Weight Loss Diet



Excludes no answer.

Desire To Lose Ten Or More Pounds

Weight Status

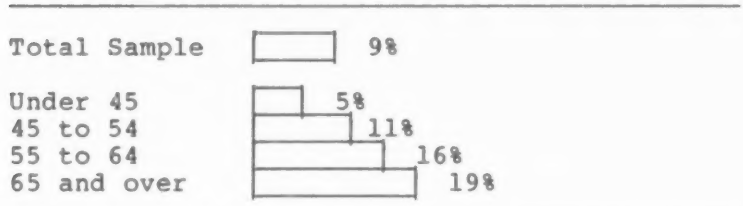
Base	Total (3226)	Income: Under $10M (798)	Income: $10M-$15M (515)	Income: $15M-$20M (451)	Income: $20M-$30M (739)	Income: $30M Or More (722)	Adults: Male (922)	Adults: Female (2303)	Percentage Of Teens: Male (547)	Percentage Of Teens: Female (507)
Trying to gain more than 10 pounds	2%	3%	2%	1%	2%	1%	4%	1%	7%	2%
Trying to gain 1 to 10 pounds	2	4	2	2	2	1	4	2	7	4
Satisfied with present weight don't worry	20	22	22	23	18	17	31	15	59	41
Satisfied with present weight but count calories	9	9	9	8	8	10	10	9	10	15
Trying to lose 1 to 10 pounds	29	24	27	32	32	34	26	31	9	23
Trying to lose more than 10 pounds	38	39	37	34	39	38	26	42	7	16

Excludes no answer.

Q. 49 - Which one of the statements below best describes this person's weight status?

The incidence of dieting for medical reasons is about one consumer in ten. However, dieting for medical reasons is primarily related to age. Among adults under 45 years of age, the reported incidence of dieting for medical reasons is quite low (5%). Among those 45 to 54 the incidence doubles (10%) and then nearly doubles again among the elderly (18%). There is no strong relationship between being on a diet for medical reasons and the sex of the respondent (men 8% vs. women 10%).

Proportion Of Population Who Reported
To Be On A Diet For Medical Reasons



Few consumers (4%) report being on a diet for such problems as complexion or weight gain.

Attitudes About One's Eating Habits

When adults evaluate their overall attitude and behavior toward food and nutrition, nearly six out of ten adults claim they try to eat a balanced diet but don't make a big deal of it (58%). The proportion of adults concerned about eating what's beneficial is approximately one in ten.

Women show a greater concern for calories than men. Overall attitudes about diet behavior show men are less concerned about food, what they eat and nutrition.

Some other observations about who's concerned and who's not concerned about what they eat:

- Consumers in the West are somewhat more likely to be concerned with eating what's beneficial and with eating a balanced diet than consumers in other regions. Consistent with this they are less likely to be concerned with just calories.

- Lower-income consumers (under $10,000) claim to be more concerned with eating what's beneficial than consumers whose income is over $10,000.

The teenage segment, as reported by parents of teenagers, can be classified into two distinct groups. Group I, the largest, represents those teenagers who eat what they like and do not worry (49%). This indicates that the various nutritional education programs aimed at teenagers appear to have had minimal impact.

Group II, the second largest group, represents teens who are basically like their parents in terms of diet and attitude. They try to eat what's right but don't make a big deal of it (34%).

It is also noteworthy that teenage girls, as indicated earlier, are more concerned with calories than teenage boys.

Attitudes About Eating

Base	Total Adults (3226)	Adult Male (922)	Adult Female (2304)	Perception: Total Teens (1043)	Perception: Teenage Male (545)	Perception: Teenage Female (498)	Age Of Respondent: Under 25 (590)	25-34 (740)	35-44 (509)	45-54 (450)	55-64 (447)	65 & Over (490)
Eats what likes	15%	28%	10%	49%	58%	40%	19%	17%	15%	15%	13%	12%
Concerned with calories	15	6	18	8	3	12	15	17	21	14	13	6
Tries to balance	58	57	58	36	34	39	55	55	54	59	60	68
Eats what is beneficial	12	10	13	7	5	9	11	11	10	12	14	15

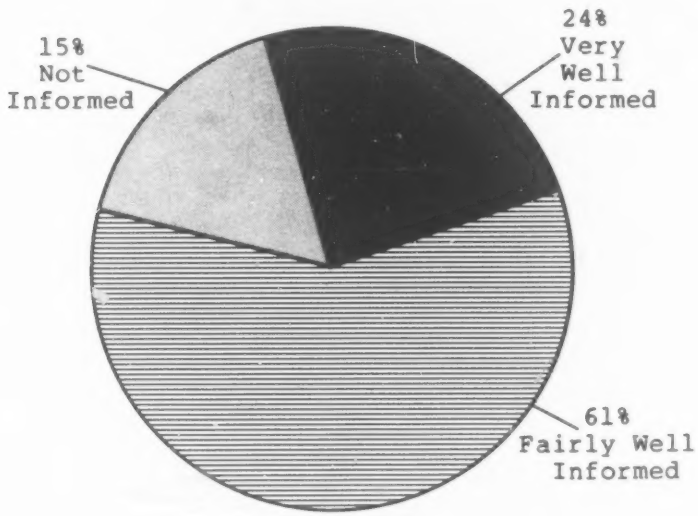
Excludes no answer.

Q. 50 - Which one of these statements best describes this person's concern about his/her diet?

Level Of Nutritional Knowledge

When adults were asked how informed they felt they and their children were about nutrition, the vast majority (85%) felt they were at least fairly well-informed; only 15% felt they were not well-informed.

Degree Of Being Informed About Nutrition



Analysis of various demographic segments shows the following:

- o There is a strong relationship between one's perception of being informed about nutrition and income. Lower-income adults are more likely to describe themselves as not informed; conversely, upper-income adults are more likely to describe themselves as very well-informed.

- Consumers in the West are more likely to feel well-informed about nutrition than consumers in other regions.

- Lower-income consumers who previously indicated they were more concerned than average in terms of eating only what's beneficial are also more likely to admit they are less informed than other consumers.

- There is a strong relationship between the sex of the respondent and being informed. Women are more likely to claim they are very well-informed about nutrition. Men are more likely to say that they are not informed. This observation is consistent with other data in the study which shows men are not as involved or as knowledgable about nutrition as women.

Self Perception Of Nutritional Knowledge

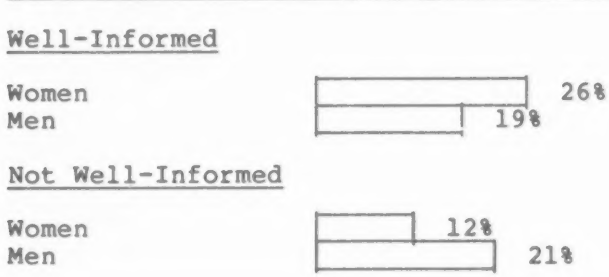


Chart excludes "Fairly Well Informed."

There is a strong relationship between one's perception of nutrition and concern for nutrition.

Relationship Of Concern For Nutrition
And Self Perception Of Knowledge

	Concern For Nutrition		
	High	Medium	Low
Base	(653)	(1862)	(751)
Well informed	48%	21%	10%
Fairly well informed	49	68	57
Not well informed	3	11	33

Repercentaged to exclude no answer.

Degree Of Being Informed About Nutrition

Base	Total	Income: Under $10M	$10M-$15M	$15M-$20M	$20M-$30M	$30M Or More	Geographic Region: East	North	South	West	Age Of Respondent: Under 25	25-34	35-44	45-54	55-64	65 & Over	Sex: Male	Female
Very well-informed	24%	21%	22%	20%	25%	29%	22%	22%	25%	27%	23%	22%	28%	29%	23%	19%	19%	26%
Fairly well-informed	61	62	65	64	60	58	64	62	61	58	61	64	59	57	61	65	59	62
Not that well-informed	15	17	13	16	14	13	14	16	14	15	16	14	13	14	16	15	21	12

Q. 4[illegible] - Would you say this person is well informed about nutrition in general, fairly well informed, or not that well informed?

When parents evaluated their teenage children, it is quite evident that adults do not see teenagers as having high-level knowledge about nutrition. As might be anticipated, teenage males are more likely to be described as having less knowledge than female teens.

Teenagers
Degree Of Being Informed About Nutrition

	Teenagers		
	Total	Male	Female
Well-informed	15%	12%	18%
Fairly well-informed	51	49	54
Not well-informed	34	39	28

Excludes no answer.

Q. 45 - Would you say this person is well-informed about nutrition in general, fairly well-informed, or not that well-informed?

Relationship Between Parents And Teenagers

	Parents Perception Of Knowledge Of Nutrition		
	Well-Informed	Fairly Well-Informed	Not Well-Informed
Teenage Male			
Well-informed	33%	2%	3%
Fairly well-informed	43	58	16
Not well-informed	10	40	83
Teenage Female			
Well-informed	44	8	--
Fairly well-informed	45	66	27
Not well-informed	11	27	73

Perceptions Of What's Needed In The Diet

Consumers were asked to indicate whether they felt they needed more, less or had about the right amount of 31 different foods, ingredients and nutritional aspects.

Overall, consumers indicate they should be reducing their intake of 16 items; increasing consumption of 13 items, with two items (eggs and milk) being consumed at an appropriate level.

The following table indicates:

- The percentage of the population surveyed who felt the item was being consumed at the right level;

- The net change in consumption for each item. The net change reflects the difference between those who said the item should be increased in their diet minus those who said it should be decreased.

With the exception of eggs and rice, consumers feel that they need to alter their intake of various foods and ingredients. In a few instances, they don't know. The latter is not surprising in light of the earlier findings where consumers admitted they were not familiar with many of the nutritional and ingredient terms. The few situations that arose where consumers did not know if more or less was needed in the diet were for trace minerals, amino acids and whey.

Eggs and rice are seen by nearly seven out of ten consumers as being consumed in their diet in just about the right amount. As many people feel the level of eggs and rice consumption should be increased as feel it should be decreased.

The products or ingredients which consumers feel they should cut back drastically are all related to health, weight and nutritional food value.

What We Should Cut Back On

Base	Percent Say Have Right Amount (3368)	Net Change (Need More/Less) In Diet (3368)
Starch	29%	-55
Animal fat	25	-50
Calories	23	-65
Caffeine	30	-62
Salt	26	-69
Sugar	23	-72
Candy	22	-69
Snack cakes	79	-56
Carbohydrates	37	-38
Vegetable shortening	53	-29
White bread	51	-36
Spaghetti	61	-22
Macaroni	60	-22
Vegetable oil	56	-22

Q. 24 - For each item listed below, please "X" the box that tells me whether you feel you need more of it in your diet, need less, or have about the right amount.

In contrast, foods/ingredients which consumers feel should be increased drastically in their diet include the more natural, less-processed foods such as fresh fruit, poultry, vegetable protein, vegetables, fiber and bulk.

PERCEIVED CHANGES NEEDED IN OUR DIET

TABLE TO COME

Perceived Changes Needed In Our Diet

Item	Have About Right Amount	Net Need More/ Less In Diet	Don't Know
Starch	29%	-55	13%
Fiber	38	+43	13
Calories	23	-65	7
Carbohydrates	37	-38	17
Vegetables	52	+43	8
Eggs	74	0	3
Poultry	62	+24	4
White bread	51	-36	7
Milk	68	+22	4
Spaghetti	61	-26	8
Snack cakes	29	-56	12
Vitamins/minerals	46	+40	10
Animal fat	25	-50	23
Meat protein	58	+ 3	15
Vegetable protein	45	+21	28
Amino acids	26	+ 3	59
Trace minerals	28	+ 8	56
Rice	67	0	11
Caffeine	30	-62	6
Salt	26	-69	4
Sugar	23	-72	3
Vegetable shortening	53	-29	14
Candy	22	-69	7
Wheat bread	53	+20	12
Vegetable oil	56	-22	15
Fresh fruit	40	+56	3
Potatoes	69	-15	4
Bulk	42	+20	24
Whey	18	+ 1	70
Macaroni	60	-26	10
Red meat	58	-11	5

Q. 24 - For each item listed below, please "X" the box that tells me whether you feel you need more of it in your diet, need less, or have about the right amount.

Frequent users of products are more likely to suggest the need to cut back on foods than non-users. Thus those who are not serving the product frequently are already consuming those products at a lower level than frequent users. Some examples are pasta and wheat-based sweet goods. Conversely, where consumption should be increased, as with wheat bread, less frequent users are more likely to recognize the need to increase usage vs. the current user.

The Need To Change Consumption

Product	Net Change Total Sample	Net Change Served Frequently	Net Change Not Served Recently
Snack cakes	-56	-66	-53
Spaghetti	-26	-32	-25
Macaroni	-26	-28	-22
White bread	-36	-39	-34
Wheat bread	+20	+19	+24

Activities Related To Food, Nutrition And Dieting

Consumers were asked to indicate from a list of 18 activities which ones they performed at least seven or more times during the last fourteen-day period. Most prevalent were snacking between meals (68%), snacking before going to bed (55%), exercising (51%) and taking vitamins (51%). All other activities were undertaken by less than half those surveyed.

Analyzing the activities by various demographic groups and attitudinal groups show wide variations. The most striking relationship overall is between activities and people's concern for nutrition. Consistent with earlier observations, those who have a high degree of interest in nutrition are more likely to:

- Drink decaffinated coffee.
- Use a salt substitute.
- Use articifical sweeteners.
- Use vitamins.
- Use skim milk instead of whole.
- Count calories.
- Drink lo-cal soft drink instead of regular.
- Use lo-cal food.
- Less likely to skip meals.
- Less likely to snack between meals/before bed.
- Less likely to overeat.
- Exercise.

Similarly, those who have little concern for nutrition show a reverse set of behavior patterns from those exhibited by the high concern group. In other words, attitudes and behavior patterns are highly related.

Things Done Seven Or More Times In Past Fourteen Days

	Total Sample	Nutrition Concern High	Medium	Low
Drank decaf coffee instead of regular	30%	37%	29%	25%
Skipped breakfast	42	33	44	47
Carried a lunch to work	23	24	23	25
Skipped lunch	22	18	23	25
Used salt sub. instead of regular salt	14	20	13	9
Snacked between meals	68	55	70	74
Skipped supper	11	11	11	11
Used artificial sweetener instead of sugar	29	39	30	20
Took vitamins	51	65	51	40
Overate	42	36	43	46
Drank skim milk instead of whole milk	45	57	45	36
Kept track of/counted calories	16	30	14	8
Drank lo-cal soft drinks instead of regular	34	40	36	28
Kept count of carbohydrates eaten	5	10	5	2
Exercised	51	61	53	38
Snacked/ate before going to bed	55	47	56	63
Ate low cal/fat food instead of regular	30	49	29	15
Let family eat weekday dinner when they want	14	14	13	16
None of the above	1	1	1	1

Q. 25 - Please tell me which of the following you have done seven or more times during the past 14 days.

Some observations about what various market segments did in the last fourteen days include:

- Women, predictably, indicated they are more likely to have counted calories and used a low calorie product instead of a regular one. They also were more likely to have taken vitamins and less likely to have snacked before bed. Working women are more likely to carry a lunch to work than men.

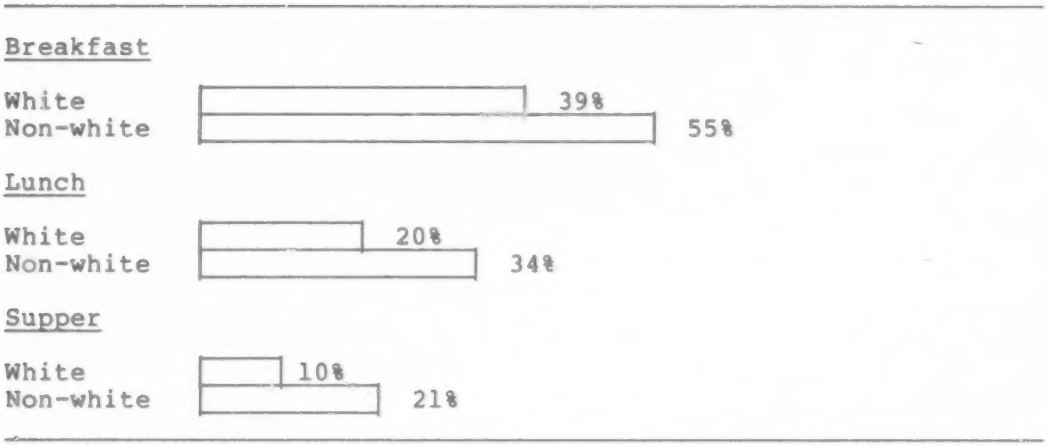
- Non-white women are more casual about meal patterns. They are more likely to skip meals (breakfast, lunch and dinner) and let their families eat when they want.

- The only major differences between working and non-working women is that working women are more likely to skip breakfast than non-working women and to drink more diet soft drinks.

- There are a number of strong relationships related to age. This is consistent with earlier observations. For example, consumption of decaffinated coffee and salt substitutes increases with age. Diet product consumption increases generally through middle age then falls off. Breakfast skipping decreases after age 54.

- Regional variations show adults in the West take better care of themselves in terms of food and nutrition habits. Those in the West are less likely to snack before going to bed, more likely to exercise, drink more skim milk instead of regular milk, take more vitamins, and are less likely to snack between meals, skip breakfast or overeat.

Meal Skipping
(Women)



Things Done Seven Or More Times In The Past Fourteen Days

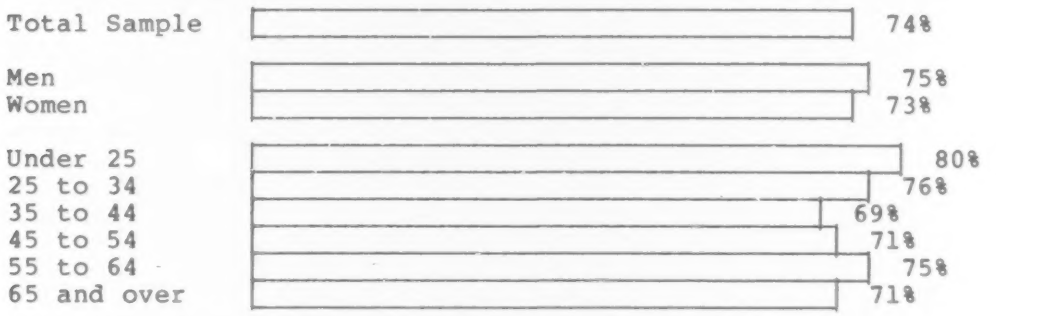
	Total	Income: Under $10M	$10M-$15M	$15M-$20M	$20M-$30M	$30M Or More	Geographic Region: East	North	South	West	Sex Of Respondent: Male	Female	White	Non-White
Drank decaf coffee instead of regular	30%	30%	32%	27%	27%	32%	31%	33%	28%	26%	25%	31%	32%	30%
Skipped breakfast	42	42	43	47	44	38	42	41	46	38	43	42	39	55
Carried a lunch to work	23	14	21	25	29	28	24	24	24	20	32	20	18	28
Skipped lunch	22	25	23	21	22	20	23	20	23	23	22	23	20	34
Used salt sub. instead of regular salt	14	15	13	14	12	14	12	13	14	15	11	14	15	11
Snacked between meals	68	64	66	70	70	69	70	71	67	62	69	67	68	64
Skipped supper	11	15	11	8	11	7	10	9	14	10	9	12	10	21
Used artificial sweetener instead of sugar	29	29	27	28	28	34	29	25	35	25	24	31	32	29
Took vitamins	51	47	47	50	54	56	51	49	49	60	46	53	54	48
Overate	42	40	40	39	45	44	41	47	42	35	40	43	43	41
Drank skim milk instead of whole milk	45	41	44	45	48	48	41	54	36	55	47	45	47	31
Kept track of/counted calories	6	13	15	16	17	18	17	18	14	14	9	18	19	17
Drank lo-cal soft drinks instead of regular	34	29	31	33	37	41	33	38	35	28	26	38	38	35
Kept count of carbonydrates eaten	5	4	4	6	4	7	7	5	5	5	4	5	6	5
Exercised	51	50	51	52	50	52	49	50	51	54	49	51	52	48
Snacked/ate before going to bed	55	59	56	56	55	51	60	57	56	46	61	53	52	59
Ate low cal/fat food instead of regular	30	25	29	30	30	35	29	31	27	33	21	33	34	29
Let family eat weekday dinner when they want	14	18	12	12	11	13	9	12	16	16	13	14	12	25

Q. 25 - Please tell me which of the following you have done seven or more times during the past 14 days.

Exercise

A large number of adults (74%) exercise at least once a week regardless of age or sex. Exercise is an activity in which parents report their teenage sons and daughters also participate (90% and 88%, respectively).

Proportion Who Exercise
At Least Once A Week



Q. 46 - How frequently does this person engage in some form of exercise?

Although the majority of Americans report exercising on some regular basis (once a week or more often) the incidence of adults who exercise for an hour or more each time is 24%. The incidence of exercising for an hour or more is more often mentioned by men (31%) than women (20%).

In contrast, teenagers are seen as typically exercising for longer periods than their parents. Longer exercise periods are more prevelant among teenage males.

Although non-white women do not exercise as often as white women, those who participate do so as often.

Having a spouse who exercises relates strongly to the behavior of the other and has a strong effect on teenagers within the household.

Frequency Of Exercising

Base	Total (3291)	Male (934)	Female (2357)	Total Teens (1060)	Teenagers Male (553)	Teenagers Female (507)
Every day or almost	30%	32%	29%	55%	60%	49%
Several times a week	28	26	29	26	24	28
About once a week	16	17	15	9	6	12
2-3 times a month	7	8	6	3	3	3
About once a month	5	4	5	2	1	3
Less often than once a month	14	13	14	5	5	5

Excludes no answer.

Q. 46 - How frequently does this person engage in some form of exercise?

Time Spent Exercising

Base	Total Adults (3229)	Adults Male (913)	Adults Female (2316)	Total Teens (1040)	Teenagers Male (540)	Teenagers Female (500)
Less than 1/2 hour	35%	32%	37%	16%	14%	19%
1/2 to 1 hour	41	37	43	40	34	45
1 to 2 hours	16	19	14	28	30	26
More than 2 hours	8	12	6	16	22	10

Excludes no answer.

Q. 47 - Approximately how much time, on the average, is spent in physical activity each time this person participates?

Those adults who exercise at least once a day report that in more than half the situations their spouses also exercise at least once a day (56%); 15% report their spouse does not exercise. Similarly, among those who seldom exercise report that the incidence of not exercising among their spouse is also high (66%).

Relationship Of Exercise Of
Adults In Same Household

	Respondent Exercises			
	Once A Day	Several Times A Week	Once A Week	Seldom/ Does Not
Spouse exercises:				
Once a day	56%	20%	18%	12%
Several times a week	19	47	25	15
Once a week	8	14	35	10
Seldom/does not	15	18	21	66

The types of exercise or activities in which adults participate vary from walking specifically for exercise (76%) to golf (11%). The activities adults participate in vary by sex.

Interestingly, women who do participate in a sport, which may be dominated by males, will participate as often or more frequently. For example, while more men claim to bicycle, swim and play tennis, women are likely to participate in these activities more often than men.

Proportion Who Participate In Activities

Activity	Total	Male	Female
Golf	11%	22%	6%
Swimming	57	66	54
Jogging	28	34	25
Walking	76	72	79
Bicycling	45	48	44
Tennis	18	23	15
Racquetball	6	12	5
Team sports	19	31	14
Rope jumping	17	11	19
Aerobic dance	21	8	26
Health club	12	9	13

Q. 55 - How frequently do you participate in the following activities?

Proportion Of Participants Who Play At Least Once A Week

Activity	Total	Male	Female
Golf	34%	39%	28%
Swimming	38	36	39
Jogging	37	38	37
Walking	65	60	67
Bicycling	45	42	46
Tennis	19	18	20
Racquetball	22	23	20
Team sports	30	36	28
Rope jumping	26	23	26
Aerobic dance	52	33	53
Health club	57	63	57

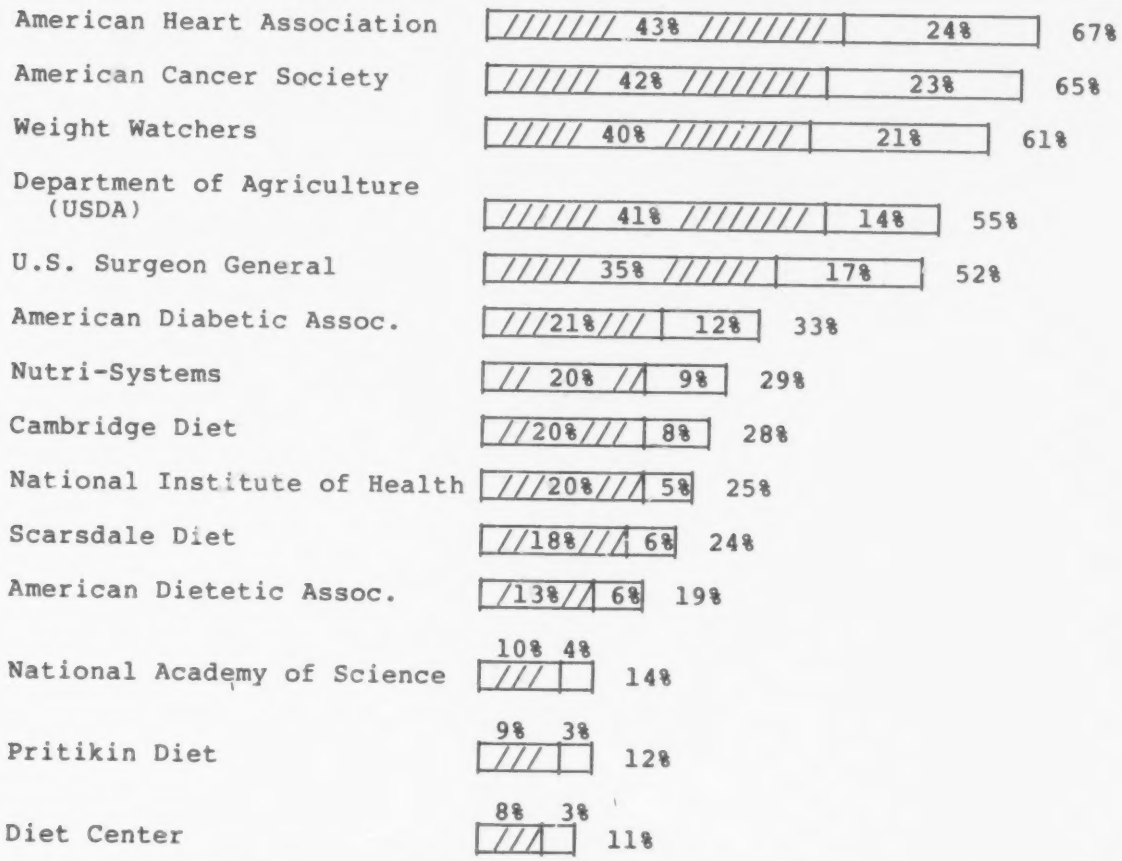
*Base: Participate in activity.

Q. 55 - How frequently do you participate in the following activities?

Familiarity With Nutritional Guidelines

Consumers were asked to indicate how familiar they are with different guidelines. They indicated that, by in large, the degree of familiarity is quite low for most programs. Three programs have substantial familiarity: American Cancer Society, American Heart Association and Weight Watchers.

Familiar With Guidelines*



*Familiarity with other programs all under 5%.

Q. 53 - How familiar are you with the guidelines published by each of the following groups?

Key: Somewhat familiar

Very familiar

Some observations among the various consumer segments evaluated are consistent with other findings in other sections of this report. The most notable observations relate to the sex of the respondent and the differences between those who have a high interest in nutrition vs. those with a low interest. Specifically:

- Men are not as aware of the various programs as women are.
- Awareness of programs relates to one's interest in nutrition.

Awareness of the various programs overall does not appear to relate to age. There are a few differences but the patterns are not consistent.

Very/Somewhat Familiar With Guidelines

Program	Total Sample	Age Of Respondent						Concern For Nutrition			Sex	
		Under 25	25-34	35-44	45-54	55-64	65 & Over	High	Medium	Low	Men	Women
Department of Agriculture (USDA)	55%	52%	52%	55%	63%	54%	54%	66%	56%	43%	54%	55%
National Institute of Health	25	25	22	25	27	26	27	34	24	17	22	25
American Cancer Society	65	69	59	65	67	66	69	71	68	58	59	68
National Academy of Science	14	13	10	14	17	16	15	19	14	10	15	13
Weight Watchers	61	61	62	63	62	63	55	66	62	55	51	66
Nutri-Systems	29	35	29	30	29	26	20	34	29	24	23	31
American Heart Association	67	65	62	67	70	69	69	69	68	59	60	69
U.S. Surgeon General	52	60	55	54	52	46	36	56	53	43	52	51
Pritekin Diet	13	7	9	13	15	15	12	21	10	6	9	12
Scarsdale Diet	24	22	25	32	29	22	17	33	24	17	19	27
Diet Center	11	12	11	12	8	10	8	12	11	9	7	12
American Dietetic Association	19	16	15	20	23	21	19	24	19	14	18	19
American Diabetic Association	33	28	29	34	37	39	30	40	32	24	31	32
Cambridge Diet	28	30	30	37	32	24	16	37	28	22	21	32

Q. 53 - How familiar are you with the guidelines published by each of the following groups?

Follow Nutritional Guidelines

Program	Have Guidelines	Follow Guidelines	Men	Women
Department of Agriculture (USDA)	19%	6%	6%	6%
National Institute of Health	12	2	1	2
American Cancer Society	22	9	8	9
National Academy of Science	11	*	*	*
Weight Watchers	21	5	3	5
Nutri-Systems	12	1	*	1
American Heart Association	20	8	1	8
U.S. Surgeon General	14	3	4	3
Pritikin Diet	12	*	*	*
Scarsdale Diet	15	1	1	1
Diet Center	11	*	*	1
American Dietetic Assoc.	13	2	2	2
American Diabetic Assoc.	16	5	4	5
Cambridge Diet	17	2	1	2
Mr. Fit	10	*	*	*
Regional Nutrition	10	*	*	*

Q. 54 - In Column A below, please "X" all of the dietary guidelines which you presently have. Then, in Column B, for each guideline you "X'd," please indicate whether or not you follow this guideline.

Meal Patterns

The purpose of this segment of the study is to explore:

- Away-from-home eating
- Purchase of fast food for home consumption
- The frequency with which families eat the main meal together

The Main Meal

While nearly two-thirds of the families eat the main meal together at least six nights out of the week, evidence of the main meal breaking down is quite visible, especially in families with children where both adults work.

Family Main Meal Eating Together

		Married		Size of Family		
	Total	Spouse Only Works	Both Work	Two	Three to Four	Five Plus
Frequency						
Practically never	3%	3%	2%	3%	3%	4%
Once a week	3	3	4	3	3	3
Twice a week	5	2	6	3	6	6
Three times a week	6	3	7	3	7	7
Four times a week	8	3	9	5	9	9
Five times a week	13	6	15	9	14	16
Six times a week	12	9	14	12	12	12
Seven times a week	50	71	42	60	44	42

Q. 5 - Approximately how many days a week, on the average, does your entire household eat the main meal together?

Proportion Eat Away At Least Once A Week

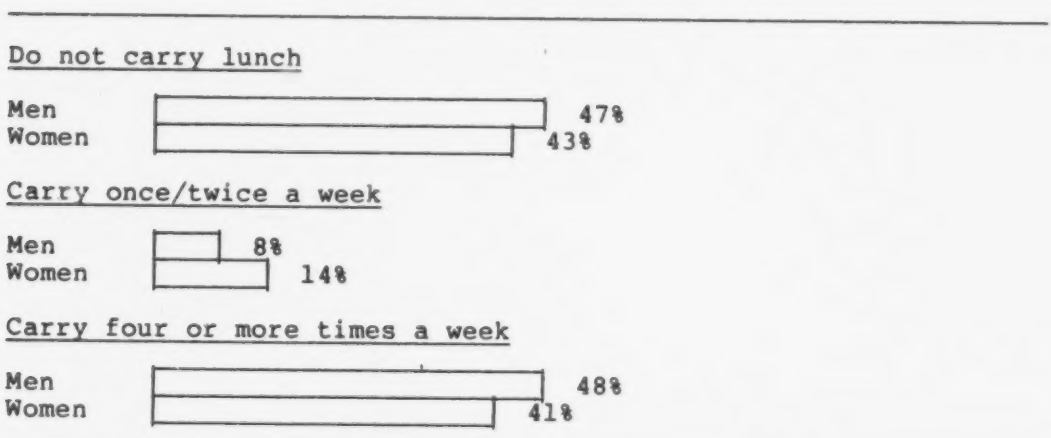
	Meal Occasion		
	Breakfast	Lunch	Dinner
Total	20%	48%	35%
Marital Status			
Single	31	70	53
Married	18	45	35
Type Of Family			
Children at home	20	48	29
No children	18	44	37
Age Of Respondent			
Under 25	22	48	36
25 to 34	24	57	39
35 to 44	24	56	37
45 to 54	19	51	37
55 to 64	18	40	34
65 and over	13	31	27
Women			
Working	17	45	34
Non-working	13	30	28

Q. 2 - About how often do you, yourself, eat breakfast, lunch or dinner away from home -- not including private homes?

Brown Bagging

Among both men and women who work, four in ten adults carry a lunch to work at least four or more times per week. The incidence of carrying lunch with regularity is slightly greater among men.

Working Adults
Frequency Of Carrying Lunch



Q. 3b - In Column A, below, please "X" the box that indicates approximately how many days a week, on the average, you carry a lunch to work. Then, in Column B, "X" the box that indicates how many days a week your spouse carries a lunch to work.

Fast Food At Home

Purchasing fast food for home consumption as the main meal is evident among a minority of consumers. About 13% purchase fast food at least once a week to eat at home. The practice is more prevelant among those families when both work and where children are present in the household. When both parents work, the motivation to go to fast food restaurants possibly reflects the time and convenience of no meal preparation.

Purchase Fast Food For
Main Meal Home Consumption

	Purchase Fast Food	
	At Least Once A Week	Practically Never
Total	13%	35%
Married		
Both work	17	30
Spouse only works	5	45
Children		
At home under 18	16	27
No children	11	44
Age		
25 or under	20	29
25 to 34	18	25
35 to 44	19	25
45 to 54	11	35
55 to 64	7	50
65 and over	5	56

Q. 4 - About how often do you, or your spouse, purchase food at fast food restaurants to be consumed at home?

Ownership Of Microwave Ovens

Secondary studies report that most appliance ownership has remained stable, except for the growth of microwave ovens. Today, just over one out of three households report owning a microwave oven. Ownership is related directly to income as one would anticipate for a specialized convenience kitchen appliance. Ownership is highest among those who have an income above $30,000, where just over half (54%) report owning a microwave oven. In contrast, only one in five households whose income is under $10,000 own a microwave oven. Ownership of microwave ovens is also greatest among households where both adults are employed outside the home and particularly in larger households in the North and West.

Ownership of microwave ovens increases with age and reaches a peak among those 45 to 54 years of age; beyond 54, ownership declines. Other studies on appliance ownership for large, expensive appliances shows similar patterns. This pattern may reflect need and ability to pay.

Microwave Ownership

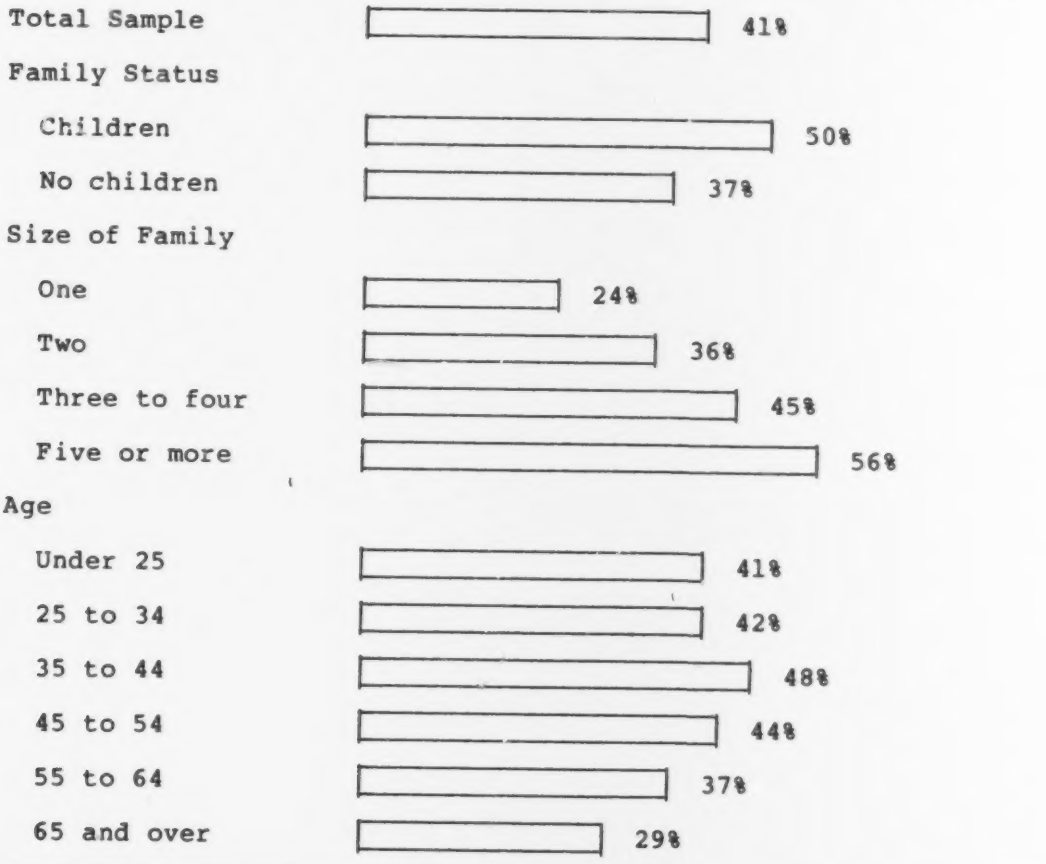
Total Sample	35%
Income	
Less than $10,000	17
$10,000 to $14,999	28
$15,000 to $19,999	37
$20,000 to $29,999	40
$30,000 or more	54
Region	
East	22
North	42
South	34
West	42
Population Density	
Central city	30
Urban	38
Rural	37
Women	
Working	37
Non-working	30
Employment	
Both adults working	47
One adult working	30
Family Size	
One	22
Two	34
Three to four	40
Five or more	39
Age Of Respondent	
Under 25	24
25 - 34	38
35 - 44	44
45 - 54	48
55 - 64	35
65 and over	22

Q. 7a - Do you own a microwave oven?

Use of microwave ovens can be characterized as a normal daily routine for most owners. Two thirds of microwave owners report they use their microwave ovens at least twice a day and its frequency of use appears to be directly related to family size and age of the owner. Obviously, these two factors relate and usage may simply reflect the opportunities for use.

Use Of Microwave Oven

Base: Those who use a microwave oven 3 or more times per day.



Q. 7b - About how frequently do you use your microwave oven?

SECTION VI

ATTITUDINAL SEGMENTATION

In addition to recording their consumption of various foods, the respondents were asked to give their reactions to statements describing personal attitudes toward nutrition, eating habits, health, etc.

Included in the analysis was an examination of the attitudes of each individual. The respondents were then grouped into meaningful market segments.

The statistical technique employed in the examination is a Q-Type Factor analysis. It is an application of a factor analysis in which correlations among <u>people</u> are studied rather than correlations among <u>statements</u>. The purpose is to see whether meaningful and stable market segments can be identified.

The analysis produced four segments which are discussed in this section. The descriptions are based on deviations between the mean score of segment respondents and the mean score of all respondents. Mean scores are computed by assigning the following weights to the answers:

	Weights
You <u>definitely disagree</u> with the statement	1
You <u>moderately disagree</u> with the statement	2
You <u>slightly disagree</u> with the statement	3
You <u>slightly agree</u> with the statement	4
You <u>moderately agree</u> with the statement	5
You <u>definitely agree</u> with the statement	6

For example, segment means and deviations from the all-respondent mean on one of the statements "I avoid foods high in starch" are as follows:

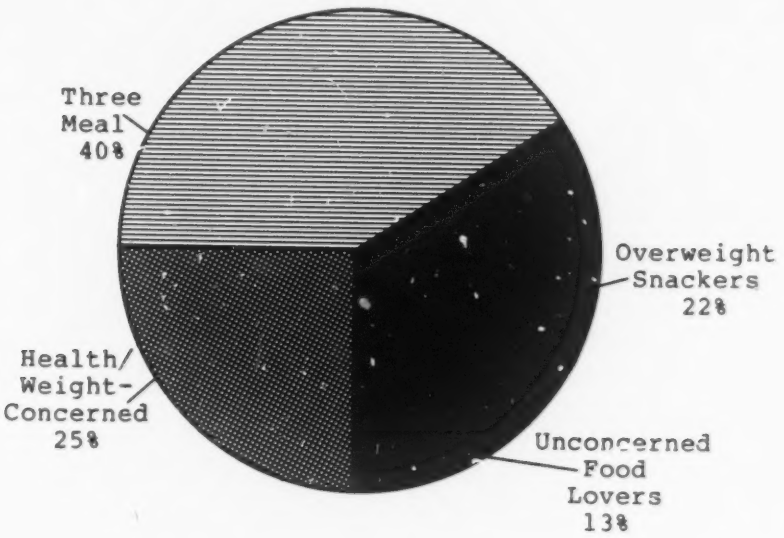
	All Respondents	Segment I	II	III	IV
Mean	3.84	4.27	3.43	3.99	2.81
Deviation	--	+0.43	-0.41	+0.14	-1.04

The segment with the highest positive deviation shows the highest level of agreement with the statement. The segment with the highest negative deviation shows the highest level of disagreement.

Attitudinal segmentation becomes relevant to marketing strategy if it can predict consumer purchase behavior. For instance, if it is found that there are no usage differences between the segments, the analysis is of little value. On the other hand, if usage is in some way correlated with attitudinal differences, attitudinal segmentation becomes useful to marketing planning. More specifically, an advertising message directed to a given segment would increase product acceptance more effectively within that segment than in other segments.

Profile Of Attitudinal Segments

Respondents were divided into four segments: three mealers (40%), overweight snackers (22%), the healthy/weight-concerned (25%) and unconcerned food lovers (13%).*



Segment I: Three Mealers

This segment represents about two out of every five respondents (40%) and is the largest of the four segments. People in this segment differ most sharply from the total market through the following beliefs and actions:

- They believe more strongly in eating a balanced, nutritious diet.

*Repercentaged to exclude 6% of the sample who did not fall into any of the four segments.

- Eating three meals a day is more important to them.
- Starting the day with a good breakfast tends to be fundamental with them.
- In defining their major concerns, they tend to include limiting the intake of salt, sugar, starch, animal fat and cholesterol.
- They believe in staying away from snacks and report having cut back significantly on such foods as cookies, cakes, donuts and pies.
- They tend to serve fruit and dessert much more than the rest of the market.
- They have an above-average concern about getting enough exercise.
- In line with their objective of eating a balanced diet, Segment I respondents tend to pay a lot more attention to ingredient labeling.
- They are very poor prospects for hamburger restaurants and pizzerias.
- They are among the best customers for wheat bread and rye bread and 2% milk or skim milk.

There are several significant demographic differences between Segment I and the rest of the market:

- They are dramatically older (median age 53.6) than the average of all respondents (41.0). This distinction probably explains some of their beliefs and actions regarding nutrition.

- A much lower proportion of them (29%) have children under 18, obviously a function of older age. The all-respondent average is 42%.

- Median household income is somewhat above average.

Segment II: Overweight Snackers

About one out of every five respondents (22%) can be assigned to this segment. A number of differentiating characteristics about their eating habits and beliefs set them apart from the rest:

- They snack most frequently and like rich desserts.
- Snacking between meals and before going to bed is the most common practice.
- They reject the notion of eating three meals a day. Dinner is the only meal they will plan with any regularity. More likely than not, they will skip breakfast.
- They much more readily admit that food is a great consolation when things are going badly for you.
- Confirming their psychological need for food, a large majority of Segment II respondents admit that they overate seven or more times in the past fourteen days.
- A large proportion regularly eats white bread, at the expense of rye or wheat bread.
- Justifying their behavior, Segment II people confess that they are not as concerned about nutrition or eating a balanced diet as they used to be.

- They will choose easy-to-fix foods for their family and will say straight forwardly that they don't enjoy preparing the main meal of the day. They disagree with the notion that cooking is fun and challenging.
- Indications are that they are permissive when it comes to children's eating habits.
- They tend to be less concerned about their intake of salt, sugar and cholesterol.
- They are among the most frequent customers of hamburger restaurants.
- Predictably, a relatively small proportion of the snackers will pay a lot of attention to ingredient labeling with any regularity.
- Concern about getting enough physical exercise is much less wide-spread than among most other people.

A demographic profile analysis shows that Segment II people tend to be:

- About average in annual household income.
- Somewhat younger (median age 38.8) than all respondents combined (41.0).
- With children under 18 (48%).
- With larger households (3.1 persons vs. 2.8 persons).

- Over one-half (54%) of the snackers say they are overweight and have to lose more than 10 pounds of their body weight, but they want to do it with frequent overeating (65% overate more than seven times in the last fourteen days), snacking and lack of physical exercise!

Segment III: Health/Weight-Concerned

One out of every four respondents (25%) belongs to this segment. A major distinction of these people is that they are relatively young, fit and trim. Their approach to diet and weight control differs significantly from the average.

- First of all, they tend to limit the intake of any food, particularly snacks and desserts. They report the lowest incidence of overeating.
- Secondly, they exercise with more regularity to maintain an acceptable weight level and/or to improve physical appearance: 64% said they exercised seven or more times in the past fourteen days.
- Limiting food intake and exercising regularly is followed by the highest degree of interest to eat nutritiously. Accordingly, they are more prone to read ingredient labeling.
- While resembling Segment I in some ways, Segment III is not nearly as much concerned about eating regularly. To them, three meals a day is not important. They skip breakfast and lunch with above-average frequency.

- o They definitely disagree with the notion that food can be a compensation when things go badly. Likewise, desserts and crackers are not necessarily associated with happy occasions and good feeling.
- o Children tend to eat everything served at the meal and to take vitamins daily.
- o Wheat bread is served by a larger percentage than average.
- o Cheese is also most popular with them.
- o Cholesterol doesn't bother them as much as it does the people in Segment I.
- o The incidence of severe weight problems is below average.

A look at the major demographic characteristics shows these differences for Segment III respondents:

- o They are much younger (median age 32.1) than average (41.0).
- o They are upscale in terms of household income.
- o Very many (53%) have children under 18, which contributes to their somewhat above average family size.

Segment IV: Unconcerned Food Lovers

A relatively small number of respondents (13%) is assigned to Segment IV. A pervading characteristic which differentiates them from most people is that they don't worry about what is good or bad nutrition:

- To many of them, packaged cookies or snack cakes have a place in a balanced diet.
- Pre-sweetened cereals without milk tend to be considered nutritious.
- They worry least about the intake of sugar, salt or cholesterol. Nor will they avoid foods high in starch.
- Things like sticking to a diet, eating a balanced diet or staying away from snacks are of lesser concern.
- The degree of attention to food ingredient labeling is about as low as among the snackers in Segment II.
- White bread, packaged cookies, desserts and candy are accepted foods for their children.
- They believe that a person can lose weight even if he or she doesn't reduce caloric intake.

- White bread, spaghetti and macaroni are eaten regularly by more people in this segment than in any other.
- In light of the very permissive, careless attitude toward nutrition, a relatively small portion of Segment IV report frequent over-eating. There is some predictability that while there is little discrimination about diet quality, quantity may be more limited, whether consciously or not.
- The incidence of seriously overweight (more than 10 lbs.) is lower than in any other segment.
- They are not as concerned about getting enough physical exercise as an average respondent.

The demographic profile of Segment IV respondents has several underlying differences:

- They have by far the lowest annual household income: $14,220 vs. $18,000 for all respondents combined.
- They represent the youngest market segment with a median age of 31.3 vs. 41.0.
- A very large proportion are households with children under 18 (57%).

Segment Related Data

Respondent is extremely concerned about:	All Respondents	Three Mealers (I)	Overweight Snackers (II)	Health/ Weight Concerned (III)	Unconcerned Food Lovers (IV)
	%	%	%	%	%
Getting enough exercise	36	41	29	42	27
Eating a balanced diet	39	51	25	41	28
Sticking to a diet	23	28	24	23	9
Using too much salt	43	52	35	45	22
Using too much sugar	45	53	40	52	24
Eating too much fat	38	47	33	38	18
Eating too much meat	18	23	16	17	5
Staying away from snacks	29	35	27	31	10
Eating three meals a day	24	36	11	17	23
Respondent eats more nutritiously now	51	59	40	61	31
Respondent is tryng to lose more than 10 lbs.	37	36	54	32	22
Did 7 or more times out of last 14 days:					
Skipped breakfast	42	13	66	67	46
Skipped lunch	22	12	28	32	29
Snacked between meals	68	65	83	57	78
Snacked before going to bed	55	51	68	48	67
Overate	42	42	65	32	32
Exercised	51	54	34	64	43
Paid a lot of attention to nutritional labeling	20	26	10	23	10
Served in past 4 weeks:					
White bread	57	55	62	54	64
Rye bread	28	34	24	27	23
Wheat bread	46	53	41	47	36
Milk - whole	52	45	57	55	66
Milk - 2%/Skimmed	46	53	46	45	35
Times per month respondent ate at:	#	#	#	#	#
Hamburger restaurant	2.65	2.07	3.14	2.99	2.73
Pizzeria	.84	.59	.84	1.13	1.01
Fancy restaurant	1.06	1.10	1.06	1.12	.56
Demographics					
Household size - mean	2.85	2.63	3.08	3.05	3.25
Annual household income - median	18,100	18,480	20,370	19,260	14,220
Age - median	41.0	53.6	38.8	32.1	31.4
Percent have children under 18	42%	29%	48%	53%	57%

Attitudes, Beliefs, Opinions
By Consumer Segments
Proportion Who Agree

	Total Sample	Three Mealer	Overweight	Health Weight Conscious	Unconcerned Food Lover
It's not bread that's fattening, it's what you put on it	34%	41%	26%	31%	36%
My family eats more food than they need	39	47	56	25	18
Spaghetti is a food I associate with low income families	14	18	16	10	7
My children are increasingly responsible for planning and preparing some of their own meals	20	20	24	22	16
My spouse often skips breakfast	36	13	58	55	38
We eat more meat than we need	37	43	44	34	17
Children put salt on just about everything before even tasting	21	23	25	22	16
I think of white bread as a filler with the main meal	25	26	26	22	25
I am not concerned with my children eating packaged snack cakes	11	11	11	10	21
When buying white bread, price is more important than quality	12	12	14	12	14
It's not spaghetti that's fattening, it's what you put on it	31	37	25	29	29
There's nothing wrong with skipping meals	17	10	24	20	20
I like rich desserts	44	44	62	27	55
Fortified white bread is better for you than enriched white bread	13	14	11	14	7
I try to limit the use of salt (sodium) in our house	64	79	53	72	34
Snacking is a sure way to put on weight	80	84	88	82	62
Pre-sweetened cereals without milk are nutritious	9	9	8	6	14
I can always tell when I've had enough to eat	57	56	50	64	65
I serve simpler meals than I did a few years ago	45	54	49	37	30
Lacking energy has little to do with my eating habits	25	29	23	18	31
Packaged cookies or snack cakes have a place in a balanced diet	10	8	11	9	22
It's difficult to know whether my spouse eats properly away from home	35	32	44	41	31
I am concerned about the sugar content of cookies	58	69	52	69	28
Natural foods are healthier than processed foods	69	76	69	75	53
I am trying to consume more fruit and vegetables	78	89	70	86	58
I avoid foods which are high in cholesterol	42	59	26	45	11
I am concerned with my intake of salt (sodium)	63	77	56	72	29
I try to avoid spaghetti	15	19	16	13	5
We fix meals today which are a lot simpler than what my mother made	54	59	65	48	44
All natural vitamins are chemicals	14	16	7	15	22
When I think of quick energy, I think of candy	43	46	54	30	54
Dinner is the only meal I plan with any regularity	47	36	67	54	44
I have a better day when I start with breakfast	60	84	40	47	54
I associate crackers with happy children	12	15	12	6	15
Complex carbohydrates provide timed release energy	18	24	13	19	11
Wheat bread is a food I associate with upper income people	8	11	8	5	5
It's important that each meal should be balanced	73	83	66	77	62
I exercise to improve my physical appearance	46	51	30	62	38

Q. 37 - I've listed below some statements about eating habits and foods. I'd like to know how much you, personally, agree or disagree with each statement.

After each statement are the numbers 1 through 6. Please circle the one number that best describes how you feel about each statement. The lower the number, the more you tend to DISAGREE with the statement. The higher the number, the more you tend to AGREE with the statement. The numbers 1 through 6 may be described as follows:

Attributes, Beliefs, Opinions
By Consumer Segments
Portion Who Agree

	Total Sample	Three Mealer	Overweight	Health Weight Conscious	Unconcerned Food Lover
Very few people know how to plan meals to get all the vitamins and minerals they need	60	62	67	57	55
A person can lose weight even if he or she doesn't reduce the number of calories taken in daily	24	19	19	32	36
Heavy snacking is a cause of hypertension	30	33	28	32	19
My children dislike the idea of eating nutritious foods	12	14	16	10	8
White bread is a food I associate with low income families	12	18	10	9	5
Nuts are a good snack for children	57	63	54	59	60
I avoid foods high in starch	32	44	22	35	10
When things are going badly for you, food is a great concolation	23	31	34	9	20
Packaged snack cakes are good snacks for children	6	5	4	5	16
We serve desserts after meals, but less often than we used to	45	53	42	42	42
I associate desserts with happy occasions and good feeling	43	50	49	29	45
I treat spaghetti as just a filler	14	18	16	11	10
Fruit is a good snack for children	93	95	98	96	91
Food alone never gives you all the vitamins and minerals you need to stay healthy	34	32	35	39	34
Food served in my household is determined by what is easiest to fix	16	15	25	9	14
I try to avoid foods containing animal fat	35	47	26	36	13
I should serve my family a breakfast every day	74	89	69	68	74
I serve packaged snack cakes to show my children I care	4	4	4	2	6
Spaghetti served with tomato sauce is nutritious	44	44	37	44	57
My trying to control the number of calories is a problem in preparing meals	39	49	52	25	24
Cold, ready-to-eat cereal and milk helps provide a good breakfast for my children	34	40	32	29	49
I'd rather buy fortified white bread than enriched white bread	10	13	9	12	8
Packaged cookies are a good snack for children	9	8	7	5	22
There's too much talk about eating three balanced meals a day	22	13	32	26	23
My family's diet is more important than my own	30	24	41	31	32
I'm confused about what I should and should not eat	17	15	26	16	13
My children and I have few disagreements about what to eat	38	37	31	46	49
I frequently serve fruit for dessert	52	67	33	54	42
My mother and I had very few disagreements about what I ate	53	57	49	51	59
I buy white bread especially for my children	17	13	20	17	23
Pressures and being on the run have more to do with lack of energy than what I eat	41	42	44	39	47
A meal is not complete without a vegetable	76	82	74	81	70
I frequently eat more than I should	49	54	77	31	33
I often skip breakfast	41	10	72	64	44
Unsalted crackers are a good snack	36	38	32	36	34
When I feel tired it isn't because I haven't been eating	52	59	55	45	55
My children are fussy eaters	20	19	31	18	22
A meal is not complete without dessert	14	18	14	4	20
Enrichment of white bread is adding back some of the vitamins and minerals lost in flour processing	52	63	45	48	54
Sweet snacks promote tooth decay	75	78	76	71	68
Sugar provides quick energy	63	65	66	58	72

Q. 37 - I've listed below some statements about eating habits and foods. I'd like to know how much you, personally, agree or disagree with each statement.

After each statement are the numbers 1 through 6. Please circle the one number that best describes how you feel about each statement. The lower the number, the more you tend to DISAGREE with the statement. The higher the number, the more you tend to AGREE with the statement. The numbers 1 through 6 may be described as follows:

Attitudes, Beliefs, Opinions
By Consumer Segments
Proportion Who Agree

	Total Sample	Three Mealer	Overweight	Health Weight Conscious	Unconcerned Food Lover
I consider myself healthy as long as I don't feel sick or tired	54	56	55	49	63
A side dish of spaghetti or noodles is a welcome change of pace from potatoes	56	58	52	58	58
I exercise to maintain an acceptable weight level	37	41	19	51	30
Raw sugar or honey is better than refined sugar	47	50	47	51	43
I'm not as concerned about nutrition as I used to be	16	14	22	11	21
I try to avoid desserts	40	43	39	52	12
When I think of energy, I think of calories	31	35	33	26	27
The cost of food determines what I plan for meals	49	51	55	48	53
Macaroni is a favorite dish of my children	42	40	47	43	55
I am concerned about the nutritional value of snacks	59	69	45	69	42
I associate a spaghetti dinner with happy meals	43	44	41	39	57
Salted pretzels are a good snack for babies while teething	7	6	7	6	12
I limit my family's use of crackers	17	21	10	23	8
More food high in carbohydrates should be eaten	10	13	7	7	9
Most foods have something good and bad about them	48	45	47	47	54
Food preparation for the main meal is a job	42	43	56	36	39
I snack frequently	31	26	56	15	43
I avoid foods that have high nitrate levels	23	33	14	24	11
I don't always serve my family a breakfast every day	34	14	62	47	31
Our children take vitamins daily	37	37	31	50	39
Food higher in energy is high in calories	25	29	23	22	30
Wheat breads don't have much whole wheat flour in them	16	17	13	16	15
It's very difficult to schedule dinner for the whole family together during the week	25	22	38	25	17
Our children eat everything served at the meal	27	27	18	37	33
I like to buy snacks that can be shared with others	47	44	53	46	60
I frequently argue with the children about eating vegetables	24	24	31	25	20
I limit my family's use of cookies	48	53	37	68	30
I enjoy preparing the main meal of the day. It's fun and challenging	43	50	25	51	44
My parents were strict about my eating habits when I was a child	38	41	30	42	37
Wheat products are a good source of carbohydrates	37	47	27	37	29
All vitamins and minerals are chemicals	16	17	10	16	24
Serving packaged snack cakes to my children makes them happy	39	36	51	32	54

Q. 37 - I've listed below some statements about eating habits and foods. I'd like to know how much you, personally, agree or disagree with each statement.

After each statement are the numbers 1 through 6. Please circle the one number that best describes how you feel about each statement. The lower the number, the more you tend to DISAGREE with the statement. The higher the number, the more you tend to AGREE with the statement. The numbers 1 through 6 may be described as follows:

The data shown in this report are weighted by age group and sex to match U.S. population characteristics. Cell frequencies and the corresponding cell weights are summarized below:

	Men			Women		
	Returns	Target	Weight Factor	Returns	Target	Weight Factor
18 - 25	11.3%	19.3%	1.71	7.1%	17.4%	2.46
25 - 34	22.8	23.8	1.05	22.3	22.0	.99
35 - 44	18.0	16.2	.90	18.3	15.3	.83
45 - 54	15.4	14.2	.93	16.6	13.8	.83
55+	32.5	26.4	.81	35.7	31.5	.88

The ratio between black and white-and-other respondents is 12% to 88%, about the same as population statistics for U.S. individuals 18 and older.

The questionnaires were mailed out on April 15, 1983. Returns were cut off on May 19, 1983.

The Questionnaire

The questionnaire was designed by Riter Marketing Research in conjunction with 200 different companies and groups representing:

- Wheat Industry Council
- U.S. Department of Agriculture
- Universal Food Corporation
- National Pasta Association
- American Bakers Association
- Independent Bakers Association

The questionnaire was based on (a) a review of pertinent published and proprietary information; (b) input from various research and marketing professionals; (c) exploratory panels among consumers; and (d) extensive pretesting. Prior to pretesting the survey, the questionnaire was distributed to more than 400 firms representing flour millers, independent/multiple bakeries, pasta manufacturers, and allied companies for their comments. A copy of the questionnaire is included in the Appendix.

Data Processing

All completed interviews were edited, coded and keypunched by Market Facts, under the supervision of Riter Marketing Research. The data was placed onto magnetic tape for processing. Each computer card was verified to assure no keypunching errors were made.

Interpretation of Data

The report was analyzed and written by Riter Marketing Research. The tables within the report are based on the actual number of respondents asked a specific question, unless otherwise indicated.

Percentages may add to slightly more or less than 100% due to rounding or due to more than one answer from a respondent to a particular question.

The number of "no responses" for a particular question is omitted in the tables throughout the report. It is common for a few people not to respond to certain questions in a survey of this type.

Consumer Segments

There are different methods for grouping consumers into special segments for analysis. Many methods are quite simple. To name a few: heavy users of a product vs. non-users, demographically, behavioral patterns and attitudinally. For our analysis, we have used a number of approaches ranging from basic ones to those involving complex statistical procedures. Our report focuses on the following segments:

- Demographic, such as men, women; household size, marital status, working status of married couples, and race.

- Shopping Involvement. Two groups of consumers are identified in terms of their involvement in grocery shopping: men and women who are involved in grocery shopping and those, predominantly men, who are not involved.

- The Nutritionally Concerned. Consumers can be classified by their interest in nutritional information in three groups: high, medium and low concern for nutrition information.

- The Nutritionally Informed. Three groups of consumers are identified by their perceptions of themselves in terms of being informed about nutrition. These groups are the well-informed, the fairly well-informed, and the not well-informed.

- Dietary and Nutritional. These two segments were based on a scale developed by Yankelovich, Skelly and White and published by Woman's Day. The scale identifies four types of consumers: (1) consumers who try for a balanced diet but don't make a big deal of it, (2) those who eat what they like, (3) those who watch and are concerned about what they eat, and (4) those who are primarily concerned with calories.

- Frequency of Product Use. These are classified by their frequency of consuming/serving specific products; e.g., frequent users of white bread vs. those who do not serve white bread.

- Attitudes. Based on consumer attitudes and opinions, this analysis produced four segments: the three mealers, the over-weight snackers, the health/weight concerned, and the unconcerned food lover. A detailed explanation of the techniques used to develop these segments is included in Section Seven of the report.

Tolerance Limits On The Results

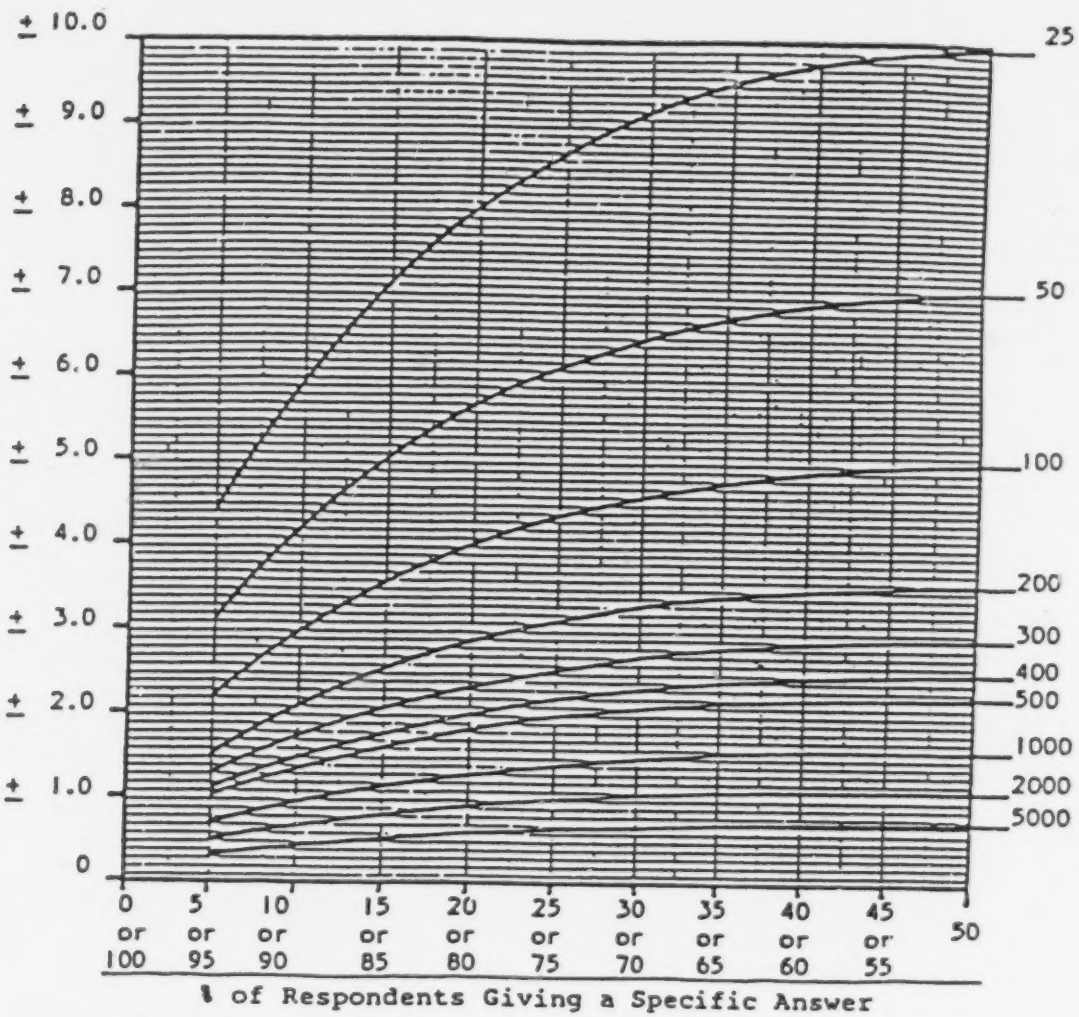
Each percentage in this report has an associated range for its probable true value. Thus, on each question, there is a tolerance limit of plus or minus X% associated with the result reported for the total sample, or for any demographic subgroup (e.g., women; men; those with a high concern for nutritional information; frequent users of white bread; etc.)

It is possible to compute the range for each reported value, given an established confidence desired in the estimate. A custom procedure is to require that the tolerance (or error) limit specified in each case not be exceeded in 95 out of 100 sample (i.e., if the survey were - hypothetically - performed on 100 different samples of the same population at the same time, the range of survey results for these samples would fall within that stated error range for 95 out of 100 samples; only in five samples would results be outside the expected range.

Tolerance limits depend on the size of the sample and on the particular percents. To assist the reader, the chart on the following page provides a quick conservative estimate of tolerance limits.

Statistical Reliability Of Survey Findings

Standard Errors of Percentages
A Measure of the Variation Due to Chance In Selection of Respondents



The curved lines show the "standard error" figures for any percentage answer, for sample sizes of from 25 to 5,000 interviews.

To illustrate, if the number of interviews is 100, and 20% (or 80%) answer yes to a specific question, then the standard error of that 20% figure is "plus or minus 4%." A standard error can be interpreted as the "plus or minus variation within which the percentage answer can be expected to fall two-thirds of the time, due to chance." In other words, the variations due to pure chance in sampling are no greater two-thirds of the time than indicated by the standard errors illustrated above.

Greater odds of accuracy can be established by using the "two standard error" level of reliability, which happens to provide odds of 20 to one that the true figure is within that range. For example, if 500 interviews yielded 75% buying product X, the odds are then 20 to one that we would still get within four percentage points (two standard errors) of 75%, that is, between 71% and 79%, buying product X, if all people in that universe were

APPENDICES

APPENDIX A: QUESTIONNAIRE

CONSUMER MAIL PANEL

P.O. BOX 70, OAK PARK, ILLINOIS 60303

(B317)11, 13, 14 (2)

Dear Panel Member,

The questions inside this booklet are all about different foods and your attitudes toward them, how you shop for them and your general feelings about eating them and serving them.

I am very anxious to see your answers to these questions, so I'd appreciate it if you'd answer them just as quickly as possible and return the questionnaire to me in the envelope provided.

To show my appreciation for your help on this study, I'll send you a gift as soon as I've processed your answers.

Again, thank you very much for your cooperation.

Cordially,

Marie

1. First of all, please confirm that you are one of these persons. ("X" ONE BOX.)

Female head of household. . . [ ]1 Male head of household [ ]2 (13)

2. About how often do you, yourself, eat breakfast, lunch or dinner away from home -- not including private homes? ("X" ONE BOX IN EACH LINE.)

	Every Day or Almost	Several Times a Week	About Once a Week	2-3 Times a Month	About Once a Month	Less Often Than Once a Month	Practically Never	
Breakfast	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(14)
Lunch	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(15)
Dinner	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(16)

3a. About how often do you, yourself, have meals away from home at each of the following kinds of places? ("X" ONE BOX FOR EACH TYPE OF PLACE.)

	Every Day or Almost	Several Times a Week	About Once a Week	2-3 Times a Month	About Once a Month	Less Often Than Once a Month	Practically Never	
Hamburger restaurants (like McDonald's, Wendy's, Burger King, Roy Rogers, etc.)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(17)
Family restaurants (like Sambo's, Denny's, Perkins, Big Boy, etc.)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(18)
Pizzerias	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(19)
Cafeterias	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(20)
Steak Houses	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(21)
Fancy, sit-down restaurants (tablecloths, etc.)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(22)

3b. In Column A, below, please "X" the box that indicates approximately how many days a week, on the average, you carry a lunch to work. Then, in Column B, "X" the box that indicates how many days a week your spouse carries a lunch to work.

	COL. A I Carry a Lunch To Work	COL. B My Spouse Carries a Lunch To Work
Once a week	[ ]1 (23)	[ ]1 (24)
Twice a week	[ ]2	[ ]2
Three times a week	[ ]3	[ ]3
Four times a week	[ ]4	[ ]4
Five times a week	[ ]5	[ ]5
Do not carry lunch	[ ]6	[ ]6
DO NOT WORK	[ ]7	[ ]7
NOT MARRIED		[ ]8

4. About how often do you, or your spouse, purchase food at fast food restaurants to be consumed at home? ("X" ONE BOX.)

Every day or almost [ ]1
Several times a week [ ]2
About once a week [ ]3
2-3 times a month [ ]4
About once a month [ ]5
Less often than once a month [ ]6
Practically never [ ]7 (25)

5. Approximately how many days a week, on the average, does your entire household eat the main meal together? ("X" ONE BOX.)

Once a week [ ]1
Twice a week [ ]2
Three times a week [ ]3
Four times a week [ ]4
Five times a week [ ]5
Six times a week [ ]6
Seven times a week (every day) [ ]7
Practically never [ ]8 (26)

6a. Approximately how many days a week, on the average, do you serve a dessert of some type with a main meal? ("X" ONE BOX.)

Once a week [ ]1
Twice a week [ ]2
Three times a week [ ]3
Four times a week [ ]4
Five times a week [ ]5
Six times a week [ ]6
Seven times a week (every day) [ ]7
Practically never [ ]8 (27)

6b. Approximately how many days a week, on the average, do you serve bread or rolls along with the main meal? ("X" ONE BOX.)

Once a week [ ]1
Twice a week [ ]2
Three times a week [ ]3
Four times a week [ ]4
Five times a week [ ]5
Six times a week [ ]6
Seven times a week (every day) [ ]7
Practically never [ ]8 (28)

7a. Do you own a microwave oven?

Yes. . . [ ]1 ——→ No. . . [ ]2 ——→ GO TO QU. 8 (29)

7b. About how frequently do you use your microwave oven? ("X" ONE BOX.)

3 times a day or more. . . . . [ ]1
2 times a day. . . . . [ ]2
1 time a day . . . . . [ ]3
3-4 times a week . . . . . [ ]4
2-3 times a week . . . . . [ ]5
Once a week. . . . . [ ]6
Less often than once a week. . . . . [ ]7 (30)

8. On which day of the week is most of your weekly grocery shopping done? ("X" ONE BOX.)

Monday . . . . . [ ]1
Tuesday. . . . . [ ]2
Wednesday. . . . . [ ]3
Thursday . . . . . [ ]4
Friday . . . . . [ ]5
Saturday . . . . . [ ]6
Sunday . . . . . [ ]7
Varies, no particular day. . . . . [ ]8 (31)

9. At what time of the day is your main grocery shopping usually done? ("X" ONE BOX.)

8:00am - 10:00am . . . . . [ ]1
10:00am - 12:00noon. . . . . [ ]2
12:00noon - 2:00pm . . . . . [ ]3
2:00pm - 4:00pm. . . . . [ ]4
4:00pm - 6:00pm. . . . . [ ]5
6:00pm - 8:00pm. . . . . [ ]6
8:00pm - 10:00pm . . . . . [ ]7
10:00pm - 12:0Midnight. . . . . [ ]8
Between midnight and 8:00am. . . . . [ ]9
Varies, no particular hour . . . . . [ ]0 (32)

10. Which of the statements below best describes how food shopping is done in your household? ("X" ONE BOX.)

I usually do the food shopping. . . . . [ ]1
My spouse usually does the food shopping. . . . . [ ]2
My spouse and I usually shop together . . . . . [ ]3
My spouse and I share the job, but do not usually shop together . . . . . [ ]4
Another member of the household usually does the actual shopping . . . . . [ ]5 (33)

11. The last time you did your major food shopping, did you. . . ("X" ONE BOX FOR EACH STATEMENT.)

Make a shopping list at home?.	Yes [ ]1	No [ ]	(34)
Use a shopping list while shopping?. . .	Yes [ ]2	No [ ]	
Read ads to see what the sales or specials were?	Yes [ ]3	No [ ]	
Make use of ingredient labels on some of the packages?	Yes [ ]4	No [ ]	
Look for dates on dairy products?. . . .	Yes [ ]5	No [ ]	
Look for dates on food packages/cans?. .	Yes [ ]6	No [ ]	
Make use of nutritional labels on some of the foods?.	Yes [ ]7	No [ ]	
Redeem coupons?.	Yes [ ]8	No [ ]	
Look for dates on packaged bakery products?.	Yes [ ]9	No [ ]	
Make use of unit pricing?.	Yes [ ]0	No [ ]	

12a. Does the store where you do most of your major food shopping have unit pricing?

Yes. . . [ ]1 No. . . [ ]2 (35)

12b. When you shop in a store which has unit pricing, do you tend to pay a lot of attention, some attention, or pay no real attention to the unit pricing information? ("X" ONE BOX.)

Pay a lot of attention. . . . . [ ]1
Pay some attention. . . . . [ ]2
Pay no real attention . . . . . [ ]3 (36)

12c. How often do you use unit pricing to compare the prices of different brands? ("X" ONE BOX.)

Very often. . . . . [ ]1
Fairly often. . . . . [ ]2
Very seldom . . . . . [ ]3
Practically never . . . . . [ ]4 (37)

(B317)(2)

13. In Column A below, please "X" those foods that you have served in your household in the past 4 weeks. Then, in Column B, for each food you have "X'd," please indicate how often you served the product by putting an "X" in one of the 7 boxes.

	COLUMN A Served in the Past 4 Weeks (38)	COLUMN B - HOW OFTEN SERVED							
		3 Times a Day or More	2 Times a Day	1 Time a Day	3-4 Times a Week	2-3 Times a Week	Once a Week	Less Often Than Once a Week	
CEREALS									
Natural Cereal	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(44)
Oatmeal/Other Cooked Cereals	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(45)
Pre-sweetened Cold Cereal	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(46)
Unsweetened Cold Cereal (except Natural)	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(47)
BEVERAGES									
Fruit Drinks	[ ]5 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(48)
Fruit Juice	[ ]6 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(49)
Milk (2%/Low Fat/Skim)	[ ]7 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(50)
Milk (Whole)	[ ]8 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(51)
Diet Soft Drinks	[ ]9 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(52)
Soft Drinks (Non-Diet)	[ ]10 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(53)
VEGETABLES	(39)								
Frozen Vegetables	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(54)
Canned Vegetables	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(55)
Fresh Vegetables (except Potatoes)	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(56)
Potatoes	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(57)
SWEET GOODS/SNACKS	(40)								
Individual Fruit Pies	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(58)
Pastries & Sweet Rolls	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(59)
Saltine Crackers	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(60)
Crackers (except Saltines)	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(61)
Pie	[ ]5 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(62)
Donuts (with hole in center)	[ ]6 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(63)
Packaged Snack Cakes*	[ ]7 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(64)
Cake	[ ]8 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(65)
Packaged Cookies	[ ]9 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(66)
FRUIT	(41)								
Canned Fruit	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(67)
Fresh Fruit	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(68)
PASTA									
Egg Noodles	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(69)
Macaroni	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(70)
Spaghetti	[ ]5 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(71)
FISH									
Shellfish/Seafood	[ ]6 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(72)
Fish (except Shellfish/Seafood)	[ ]7 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(73)
POULTRY									
Turkey	[ ]8 →	[ ]	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(74)
Chicken	[ ]9 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(75)
MEAT	(42)								(78-2) (79-0/80-1)
Ground Beef	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(13)
Red Meat (except Ground Beef)	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(14)
Pork/Ham	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(15)
BREADS									
Hamburger/Hot Dog Buns	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(16)
Rolls	[ ]5 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(17)
Bagels	[ ]6 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(18)
English Muffins	[ ]7 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(19)
Wheat Bread	[ ]8 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(20)
Rye Bread	[ ]9 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(21)
White Bread	[ ]10 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(22)
OTHER FOODS	(43)								
Cheese	[ ]1 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(23)
Eggs	[ ]2 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(24)
Pizza	[ ]3 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(25)
Rice	[ ]4 →	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(26)

*Cupcakes, chocolate covered or creme filled cakes - sold in individual and family size packages.

14. For each type of food listed below, please indicate whether you buy more now, about the same, or buy less now for your household than a few years ago.

	Buy More Now	Buy About the Same	Buy Less Now	Don't Buy Now	Have Never Bought	
CEREALS						
Natural Cereal	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(27)
Oatmeal/Other Cooked Cereals	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(28)
Pre-sweetened Cold Cereal	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(29)
Unsweetened Cold Cereal (except Natural)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(30)
BEVERAGES						
Fruit Drinks	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(31)
Fruit Juice	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(32)
Milk (2%/Low Fat/Skim)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(33)
Milk (Whole)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(34)
Diet Soft Drinks	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(35)
Soft Drinks (Non-Diet)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(36)
VEGETABLES						
Frozen Vegetables	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(37)
Canned Vegetables	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(38)
Fresh Vegetables (except Potatoes)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(39)
Potatoes	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(40)
SWEET GOODS/SNACKS						
Individual Fruit Pies	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(41)
Pastries & Sweet Rolls	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(42)
Saltine Crackers	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(43)
Crackers (except Saltines)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(44)
Pie	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(45)
Donuts (with hole in center)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(46)
Packaged Snack Cakes*	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(47)
Cake	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(48)
Packaged Cookies	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(49)
FRUIT						
Canned Fruit	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(50)
Fresh Fruit	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(51)
PASTA						
Egg Noodles	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(52)
Macaroni	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(53)
Spaghetti	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(54)
FISH						
Shellfish/Seafood	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(55)
Fish (except Shellfish/Seafood)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(56)
POULTRY						
Turkey	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(57)
Chicken	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(58)
MEAT						
Ground Beef	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(59)
Red Meat (except Ground Beef)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(60)
Pork/Ham	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(61)
BREADS						
Hamburger/Hot Dog Buns	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(62)
Rolls	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(63)
Bagels	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(64)
English Muffins	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(65)
Wheat Bread	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(66)
Rye Bread	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(67)
White Bread	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(68)
OTHER FOODS						
Cheese	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(69)
Eggs	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(70)
Pizza	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(71)
Rice	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	(72)

(76-C)
(79-C)8-

*Cupcakes, chocolate covered or creme filled cakes - sold in individual and family size packages.

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15. For each of the terms listed below, please "X" one box (going across) to indicate how familiar you are with the term and its meaning.

	Not Familiar With Term	Heard Before, But Not Familiar With Meaning	Somewhat Familiar With Meaning	Very Familiar With Meaning	CARD #3 DUP. 1-22
Enriched Flour	[ ]1	[ ]2	[ ]3	[ ]4	(13)
Whey	[ ]1	[ ]2	[ ]3	[ ]4	(14)
Nitrates/Nitrites	[ ]1	[ ]2	[ ]3	[ ]4	(15)
Caffeine	[ ]1	[ ]2	[ ]3	[ ]4	(16)
Vitamins	[ ]1	[ ]2	[ ]3	[ ]4	(17)
Soy Protein	[ ]1	[ ]2	[ ]3	[ ]4	(18)
Nutrient Density	[ ]1	[ ]2	[ ]3	[ ]4	(19)
Trace Minerals	[ ]1	[ ]2	[ ]3	[ ]4	(20)
Amino Acids	[ ]1	[ ]2	[ ]3	[ ]4	(21)
Empty Calories	[ ]1	[ ]2	[ ]3	[ ]4	(22)
Carbohydrates	[ ]1	[ ]2	[ ]3	[ ]4	(23)
Complex Carbohydrates	[ ]1	[ ]2	[ ]3	[ ]4	(24)
Fiber	[ ]1	[ ]2	[ ]3	[ ]4	(25)
Vegetable Protein	[ ]1	[ ]2	[ ]3	[ ]4	(26)
Vegetable Shortening	[ ]1	[ ]2	[ ]3	[ ]4	(27)
Meat Protein	[ ]1	[ ]2	[ ]3	[ ]4	(28)
Animal Fat	[ ]1	[ ]2	[ ]3	[ ]4	(29)
Starch	[ ]1	[ ]2	[ ]3	[ ]4	(30)
Minerals	[ ]1	[ ]2	[ ]3	[ ]4	(31)

16. For each of the products below, please "X" the one box that indicates how good a value you think it is for the money.

PRODUCTS	Poor Value For Money	Fair Value For Money	Good Value For Money	Excellent Value For Money	
Rice	[ ]1	[ ]2	[ ]3	[ ]4	(32)
Red Meat	[ ]1	[ ]2	[ ]3	[ ]4	(33)
Fresh Fruit	[ ]1	[ ]2	[ ]3	[ ]4	(34)
Packaged Donuts	[ ]1	[ ]2	[ ]3	[ ]4	(35)
Wheat Bread	[ ]1	[ ]2	[ ]3	[ ]4	(36)
Macaroni (Dry Packaged)	[ ]1	[ ]2	[ ]3	[ ]4	(37)
Enriched Flour	[ ]1	[ ]2	[ ]3	[ ]4	(38)
Packaged Cookies	[ ]1	[ ]2	[ ]3	[ ]4	(39)
Snack Cakes	[ ]1	[ ]2	[ ]3	[ ]4	(40)
Pizza	[ ]1	[ ]2	[ ]3	[ ]4	(41)
Milk	[ ]1	[ ]2	[ ]3	[ ]4	(42)
Saltine Crackers	[ ]1	[ ]2	[ ]3	[ ]4	(43)
English Muffins	[ ]1	[ ]2	[ ]3	[ ]4	(44)
White Bread	[ ]1	[ ]2	[ ]3	[ ]4	(45)
Spaghetti (Dry Packaged)	[ ]1	[ ]2	[ ]3	[ ]4	(46)
Egg Noodles (Dry Packaged)	[ ]1	[ ]2	[ ]3	[ ]4	(47)
Eggs	[ ]1	[ ]2	[ ]3	[ ]4	(48)
Potatoes	[ ]1	[ ]2	[ ]3	[ ]4	(49)

17. Do you find that you pay a lot of attention, some attention, or no real attention to the nutritional labeling on foods? ("X" ONE BOX.)

A lot of attention [ ]1
Some attention [ ]2
No real attention [ ]3 (50)

18. About how often do you put back a package on the shelf because you found out from the label that it didn't contain as much nutritional value as you were looking for? Is it very often, fairly often, very seldom, or practically never? ("X" ONE BOX.)

Very often [ ]1
Fairly often [ ]2
Very seldom [ ]3
Practically never [ ]4 (51)

19. And, how often do you bother to compare the nutritional value of two or more different brands? ("X" ONE BOX.)

Very often [ ]1
Fairly often [ ]2
Very seldom [ ]3
Practically never [ ]4 (52)

20. Which two or three items from the following list are most important to you to have included on a food label?

	(53)		(54)
Carbohydrate content	[ ]1	Fat content	[ ]1
Protein content	[ ]2	Calorie content	[ ]2
Sugar content	[ ]3	Nutrient content	[ ]3
Sodium (salt) content	[ ]4	Cholesterol content	[ ]4
Mineral content	[ ]5	Complex carbohydrate content	[ ]5
Vitamin content	[ ]6	Nitrate/Nitrite content	[ ]6
Starch content	[ ]7	Fiber content	[ ]7
Enrichment	[ ]8	Food additives/preservatives	[ ]8

21. How much attention do you pay to ingredient labeling on foods? ("X" ONE BOX.)

A lot of attention [ ]1
Some attention [ ]2
No real attention [ ]3 (55)

22. And, how often do you bother to compare the ingredients of two or more different brands? ("X" ONE BOX.)

Very often [ ]1
Fairly often [ ]2
Very seldom [ ]3
Practically never [ ]4 (56)

23. Shown below are two ingredient labels for the same product. Version Code Q uses the technical terms; the other version, Code Z, uses the common or generic terms. Would you prefer the manufacturers to identify ingredients using technical or common names for food ingredients? ("X" ONE BOX.)

CODE Q	CODE Z
Sodium Chloride	Salt
Thiamin Mononitrate	Vitamin B1
Ascorbic Acid	Vitamin C
Sodium Riboflavin Phosphate	Vitamin B2
Propionic	Mold Inhibitor

Prefer Code Q, technical names. . . . . [ ]1
Prefer Code Z, common names . . . . . [ ]2 (57)

24. For each item listed below, please "X" the box that tells me whether you feel you need more of it in your diet, need less, or have about the right amount.

	Need More In Diet	Need Less In Diet	Have About Right Amount In Diet	Don't Know	
Red Meat	[ ]1	[ ]2	[ ]3	[ ]4	(58)
Macaroni	[ ]1	[ ]2	[ ]3	[ ]4	(59)
Whey	[ ]1	[ ]2	[ ]3	[ ]4	(60)
Bulk	[ ]1	[ ]2	[ ]3	[ ]4	(61)
Potatoes	[ ]1	[ ]2	[ ]3	[ ]4	(62)
Fresh Fruits	[ ]1	[ ]2	[ ]3	[ ]4	(63)
Vegetable Oil	[ ]1	[ ]2	[ ]3	[ ]4	(64)
Wheat Bread	[ ]1	[ ]2	[ ]3	[ ]4	(65)
Candy	[ ]1	[ ]2	[ ]3	[ ]4	(66)
Vegetable Shortening	[ ]1	[ ]2	[ ]3	[ ]4	(67)
Sugar	[ ]1	[ ]2	[ ]3	[ ]4	(68)
Salt	[ ]1	[ ]2	[ ]3	[ ]4	(69)
Caffeine	[ ]1	[ ]2	[ ]3	[ ]4	(70)
Rice	[ ]1	[ ]2	[ ]3	[ ]4	(71)
Trace Minerals	[ ]1	[ ]2	[ ]3	[ ]4	(72)
Amino Acids	[ ]1	[ ]2	[ ]3	[ ]4	(73)
Vegetable Protein	[ ]1	[ ]2	[ ]3	[ ]4	(74)
Meat Protein	[ ]1	[ ]2	[ ]3	[ ]4	(75)
Animal Fat	[ ]1	[ ]2	[ ]3	[ ]4	(76)
Vitamins/Minerals	[ ]1	[ ]2	[ ]3	[ ]4	(78-2)(77)
Packaged Snack Cake	[ ]1	[ ]2	[ ]3	[ ]4	(79-0/80-3)(13)
Spaghetti	[ ]1	[ ]2	[ ]3	[ ]4	(14)
Milk	[ ]1	[ ]2	[ ]3	[ ]4	(15)
White Bread	[ ]1	[ ]2	[ ]3	[ ]4	(16)
Poultry	[ ]1	[ ]2	[ ]3	[ ]4	(17)
Eggs	[ ]1	[ ]2	[ ]3	[ ]4	(18)
Vegetables	[ ]1	[ ]2	[ ]3	[ ]4	(19)
Carbohydrates	[ ]1	[ ]2	[ ]3	[ ]4	(20)
Calories	[ ]1	[ ]2	[ ]3	[ ]4	(21)
Fiber	[ ]1	[ ]2	[ ]3	[ ]4	(22)
Starch	[ ]1	[ ]2	[ ]3	[ ]4	(23)

25. Please tell me which of the following you have done seven or more times during the past 14 days. ("X" AS MANY AS APPLY.)

During the past 14 days, I did the following 7 or more times. . . .

Drank decaffeinated coffee instead of regular coffee. . . . . [ ]1 (24)
Skipped breakfast . . . . . [ ]2
Carried a lunch to work . . . . . [ ]3
Skipped lunch . . . . . [ ]4

Used a salt substitute in place of regular salt . . . . . [ ]5
Snacked between meals . . . . . [ ]6
Skipped supper. . . . . [ ]7
Used artificial sweetener instead of sugar. . . . . [ ]8

Took vitamins . . . . . [ ]9
Overate . . . . . [ ]0
Drank skim or low fat milk instead of whole milk. . . . . [ ]X
Kept track of/counted calories. . . . . [ ]R

Drank low-cal soft drinks instead of regular soft drinks. . . . . [ ]1 (25)
Kept count of the carbohydrates I ate . . . . . [ ]2
Exercised . . . . . [ ]3

Snacked/ate before going to bed . . . . . [ ]4
Ate lower fat or lower calorie food instead of the regular version. . . . [ ]5
Let everyone eat supper/dinner during the week when they felt like it . . [ ]6

During the last 14 days I did none of the above 7 or more times . . . . . [ ]0

26. For each of the products listed below, please "X" the THREE major ingredients of the product.

INGREDIENTS	Egg Noodles (Dry Packaged)	Packaged Donuts	Saltine Crackers	Wheat Bread	Packaged Cookies	Packaged Snack Cakes*	Macaroni (Dry Packaged)	Spaghetti (Dry Packaged)	White Bread
Preservatives/Additives	[ ]1 (26)	[ ]1 (27)	[ ]1 (28)	[ ]1 (29)	[ ]1 (30)	[ ]1 (31)	[ ]1 (32)	[ ]1 (33)	[ ]1 (34)
Milk	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
Sugar	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
Yeast	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Eggs	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
Shortening	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6
Flour	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7
Salt	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8
Water	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9
Vitamins/Minerals	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0
Whey	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X

27. For each product listed across the top below, please "X" all the things which you feel that food provides in a person's diet -- whether or not you, personally, eat it. (35 open)

	Egg Noodles (Dry Packaged)	Packaged Donuts	Saltine Crackers	Wheat Bread	Packaged Cookies	Packaged Snack Cakes*	Macaroni (Dry Packaged)	Spaghetti (Dry Packaged)	White Bread
Nitrates/Nitrites	[ ]1 (36)	[ ]1 (38)	[ ]1 (40)	[ ]1 (42)	[ ]1 (44)	[ ]1 (46)	[ ]1 (48)	[ ]1 (50)	[ ]1 (52)
Caffeine	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
Sugar	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
Salt	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Vegetable Shortening	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
Vitamins	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6
Trace Minerals	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7
Amino Acids	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8
Empty Calories	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9
Carbohydrates	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0
Complex carbohydrates	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X
Fiber	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R
Vegetable Protein	[ ]1 (37)	[ ]1 (39)	[ ]1 (41)	[ ]1 (43)	[ ]1 (45)	[ ]1 (47)	[ ]1 (49)	[ ]1 (51)	[ ]1 (53)
Meat Protein	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
Animal Fat	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
Starch	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Minerals	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5

28a. Does the store in which you do most of your grocery shopping have an in-store bakery section -- that is, a section which has fresh bread, rolls and other bakery items which are baked daily right in the store?

Yes. . . [ ]1 ——→

No. . . [ ]2 ——→ GO TO QU. 29 (54)

28b. How frequently do you purchase bread, rolls or other baked items from the in-store bakery section? ("X" ONE BOX.)

Once a week or more often. . . . . .[ ]1 (55)
About every 2 weeks. . . . . .[ ]2
About 2 to 3 times a month . . . . . .[ ]3
About once a month . . . . . .[ ]4
Less than once a month . . . . . .[ ]5

28c. About how often do you make a special trip to the store where you do most of your grocery shopping to purchase bread, rolls or other baked goods from the in-store bakery section? ("X" ONE BOX.)

Make Special Trip To Store Because of In-Store Bakery Counter. . .

Once a week or more often. . . . . .[ ]1 (56)
About every 2 weeks. . . . . .[ ]2
About 2 to 3 times a month . . . . . .[ ]3
About once a month . . . . . .[ ]4
Less than once a month . . . . . .[ ]5
Never make special trip to store because of in-store bakery . . . . . .[ ]6

29. For each product listed across the top below, please "X" the statements which, in your opinion, describe that product. First, "X" the statements for Macaroni (Dry Packaged). Then, go to "Potatoes," and so on. ("X" AS MANY STATEMENTS AS APPLY FOR EACH PRODUCT.)

STATEMENTS	Macaroni (Dry Packaged)	Potatoes	Wheat Bread	Spaghetti (Dry Packaged)	Eggs	Fresh Fruits	White Bread	Packaged Cookies	Whole Milk
Nutritious	1 (57)	1 (60)	1 (63)	1 (66)	1 (69)	1 (72)	1 (75)	1 (13)	1 (16)
Fresh	2	2	2	2	2	2	2	2	2
Provides quick energy	3	3	3	3	3	3	3	3	3
Product I trust	4	4	4	4	4	4	4	4	4
Wholesome	5	5	5	5	5	5	5	5	5
Natural	6	6	6	6	6	6	6	6	6
Expensive	7	7	7	7	7	7	7	7	7
High in fat	8	8	8	8	8	8	8	8	8
Junk food	9	9	9	9	9	9	9	9	9
High in salt content	0	0	0	0	0	0	0	0	0
Low in fiber	X	X	X	X	X	X	X	X	X
Filling	R	R	R	R	R	R	R	R	R
Liked especially by children	1 (58)	1 (61)	1 (64)	1 (67)	1 (70)	1 (73)	1 (76)	1 (14)	1 (17)
Bad for you	2	2	2	2	2	2	2	2	2
I enjoy eating frequently	3	3	3	3	3	3	3	3	3
High in sugar	4	4	4	4	4	4	4	4	4
High in cholesterol	5	5	5	5	5	5	5	5	5
Little nutritional value	6	6	6	6	6	6	6	6	6
A good source of protein	7	7	7	7	7	7	7	7	7
A good source of vitamins and minerals	8	8	8	8	8	8	8	8	8
Does not have much food value	9	9	9	9	9	9	9	9	9
High in carbohydrates	0	0	0	0	0	0	0	0	0
Liked especially by adults	X	X	X	X	X	X	X	X	X
Has few preservatives/ additives	R	R	R	R	R	R	R	R	R
High in calories	1 (59)	1 (62)	1 (65)	1 (68)	1 (71)	1 (74)	1 (77)	1 (15)	1 (18)
Good tasting	2	2	2	2	2	2	2	2	2
High in starch	3	3	3	3	3	3	3	3	3
Provides roughage and fiber	4	4	4	4	4	4	4	4	4
Low in carbohydrates	5	5	5	5	5	5	5	5	5
Good for growing children	6	6	6	6	6	6	6	6	6
Good food value for the money	7	7	7	7	7	7	7	7	7
Low in cholesterol	8	8	8	8	8	8	8	8	8
Part of a well-balanced diet	9	9	9	9	9	9	9	9	9
Fattening	0	0	0	0	0	0	0	0	0
						(78-2)	(79-0)	(80-4)	

30. Below are the same statement, but a new list of products. Please do the same for these products as you did above -- "X" the statements which, in your opinion, describe each product. ("X" AS MANY STATEMENTS AS APPLY FOR EACH PRODUCT.)

STATEMENTS	Wheat	Saltine Crackers	Chicken	Ground Beef	Egg Noodles	Pizza	Packaged Donuts	Packaged Snack Cakes*	Fresh Pasta
Nutritious	1 (19)	1 (22)	1 (25)	1 (28)	1 (31)	1 (34)	1 (37)	1 (40)	1 (43)
Fresh	2	2	2	2	2	2	2	2	2
Provides quick energy	3	3	3	3	3	3	3	3	3
Product I trust	4	4	4	4	4	4	4	4	4
Wholesome	5	5	5	5	5	5	5	5	5
Natural	6	6	6	6	6	6	6	6	6
Expensive	7	7	7	7	7	7	7	7	7
High in fat	8	8	8	8	8	8	8	8	8
Junk food	9	9	9	9	9	9	9	9	9
High in salt content	0	0	0	0	0	0	0	0	0
Low in fiber	X	X	X	X	X	X	X	X	X
Filling	R	R	R	R	R	R	R	R	R
Liked especially by children	1 (20)	1 (23)	1 (26)	1 (29)	1 (32)	1 (35)	1 (38)	1 (41)	1 (44)
Bad for you	2	2	2	2	2	2	2	2	2
I enjoy eating frequently	3	3	3	3	3	3	3	3	3
High in sugar	4	4	4	4	4	4	4	4	4
High in cholesterol	5	5	5	5	5	5	5	5	5
Little nutritional value	6	6	6	6	6	6	6	6	6
A good source of protein	7	7	7	7	7	7	7	7	7
A good source of vitamins and minerals	8	8	8	8	8	8	8	8	8
Does not have much food value	9	9	9	9	9	9	9	9	9
High in carbohydrates	0	0	0	0	0	0	0	0	0
Liked especially by adults	X	X	X	X	X	X	X	X	X
Has few preservatives/ additives	R	R	R	R	R	R	R	R	R
High in calories	1 (21)	1 (24)	1 (27)	1 (30)	1 (33)	1 (36)	1 (39)	1 (42)	1 (45)
Good tasting	2	2	2	2	2	2	2	2	2
High in starch	3	3	3	3	3	3	3	3	3
Provides roughage and fiber	4	4	4	4	4	4	4	4	4
Low in carbohydrates	5	5	5	5	5	5	5	5	5
Good for growing children	6	6	6	6	6	6	6	6	6
Good food value for the money	7	7	7	7	7	7	7	7	7
Low in cholesterol	8	8	8	8	8	8	8	8	8
Part of a well-balanced diet	9	9	9	9	9	9	9	9	9
Fattening	0	0	0	0	0	0	0	0	0

*Cupcakes, chocolate covered or creme filled cakes - sold in individual and family size packages.

31a. Down the side below is a list of statements that people have made about different kinds of food products. Across the top are different types of products. For each, please "X" all the statements that you feel describe it. ("X" AS MANY AS APPLY FOR EACH PRODUCT.)

STATEMENTS	White Bread	Wheat Bread	Rye Bread	Hamburger Buns/Hot Dog Rolls	English Muffins
For eating right out of package.	[ ]1 (46)	[ ]1 (48)	[ ]1 (50)	[ ]1 (52)	[ ]1 (54)
Grainy texture	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
To be served with main course.	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
Chemical vitamins.	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Natural vitamins	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
Depleted	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6
Nutritious	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7
For French toast	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8
For toasting	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9
Bleached	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0
Cheap.	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X
Firm texture	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R
For sandwiches	[ ]1 (47)	[ ]1 (49)	[ ]1 (51)	[ ]1 (53)	[ ]1 (55)
Expensive.	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
Unnatural.	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
Flavorful.	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Bland tasting.	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
Soft/spongy.	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6

31b. Here are more statements. Again, for each type of product listed across the top below, "X" all the statements that you feel describe it. ("X" AS MANY AS APPLY FOR EACH PRODUCT.)

STATEMENTS	Rye Bread	Hamburger Buns/Hot Dog Rolls	English Muffins
Nutritious	[ ]1 (56)	[ ]1 (59)	[ ]1 (62)
Fresh.	[ ]2	[ ]2	[ ]2
Provides quick energy.	[ ]3	[ ]3	[ ]3
Product I trust.	[ ]4	[ ]4	[ ]4
Wholesome.	[ ]5	[ ]5	[ ]5
Natural.	[ ]6	[ ]6	[ ]6
Expensive.	[ ]7	[ ]7	[ ]7
High in fat.	[ ]8	[ ]8	[ ]8
Junk food.	[ ]9	[ ]9	[ ]9
High in salt content	[ ]0	[ ]0	[ ]0
Low in fiber	[ ]X	[ ]X	[ ]X
Filling.	[ ]R	[ ]R	[ ]R
Liked especially by children	[ ]1 (57)	[ ]1 (60)	[ ]1 (63)
Bad for you.	[ ]2	[ ]2	[ ]2
I enjoy eating frequently.	[ ]3	[ ]3	[ ]3
High in sugar.	[ ]4	[ ]4	[ ]4
High in cholesterol.	[ ]5	[ ]5	[ ]5
Little nutritional value	[ ]6	[ ]6	[ ]6
A good source of protein	[ ]7	[ ]7	[ ]7
A good source of vitamins and minerals	[ ]8	[ ]8	[ ]8
Does not have much food value.	[ ]9	[ ]9	[ ]9
High in carbohydrates.	[ ]0	[ ]0	[ ]0
Liked especially by adults	[ ]X	[ ]X	[ ]X
Has few preservatives/additives.	[ ]R	[ ]R	[ ]R
High in calories	[ ]1 (58)	[ ]1 (61)	[ ]1 (64)
Good tasting	[ ]2	[ ]2	[ ]2
High in starch	[ ]3	[ ]3	[ ]3
Provides roughage and fiber.	[ ]4	[ ]4	[ ]4
Low in carbohydrates	[ ]5	[ ]5	[ ]5
Good for growing children.	[ ]6	[ ]6	[ ]6
Good food value for the money.	[ ]7	[ ]7	[ ]7
Low in cholesterol	[ ]8	[ ]8	[ ]8
Part of a well-balanced diet	[ ]9	[ ]9	[ ]9
Fattening.	[ ]0	[ ]0	[ ]0

32. Now, think about white bread. Listed below are statements that some people have made about cutting back or tending to avoid eating white bread. Please "X" those statements that apply to you, personally.

It lacks firm texture.	[ ]1 (65)
It's made with too much salt	[ ]2
It makes you feel full	[ ]3
It doesn't provide bulk.	[ ]4
It doesn't taste good by itself.	[ ]5
It lacks fiber	[ ]6
It's more suitable for children than adults.	[ ]7
The preservatives in it.	[ ]8
I don't eat many foods that require bread.	[ ]9
It's expensive for what you get.	[ ]0
The gummy texture of it.	[ ]X
It is high in starch	[ ]R
It is fattening.	[ ]1 (66)
White bread is junk food	[ ]2
White bread has little nutritional value	[ ]3
Prefer the taste of variety breads (rye, wheat, etc.).	[ ]4
Don't eat sandwiches as much as I used to.	[ ]5

(67-77 open)
(78-2)
(79-0/80-5)
CD. #6
DUP 1-12
(13-30 open)

33. On many bread labels, the term "Enriched Bread" is used. Please "X" all the statements below which, in your opinion, describe what "Enriched" means to bread.

Added calories. . . . . [ ]1
Added protein . . . . . [ ]2
Added fiber . . . . . [ ]3
Added vitamins and minerals . . . . . [ ]4
Added sugar . . . . . [ ]5
Added preservatives/additives . . . . . [ ]6
Better tasting. . . . . [ ]7
Better for you. . . . . [ ]8
Don't know. . . . . [ ]9 (31)

34a. Do you ever buy white bread for use in your household?

Yes. . [ ]1 ——→ No. . [ ]2 ——→GO TO QU. 37 (32)

34b. Please think about the last 10 loaves of white bread you purchased. I'd like to know where you made these purchases. For each location listed below, please write in how many of the last 10 loaves of white bread you purchased were made from that location. Write in "0" if none were made from any particular location. Remember, your total should equal 10.

LOCATIONS	Out of Last 10 Loaves of White Bread Purchased, Number of Loaves Bought From Each Location	
From shelf in supermarket where both branded and store brand bread are located.	_____	(33)
From supermarket in-store bakery*	_____	(34)
From convenience store (like 7-11).	_____	(35)
From neighborhood retail bakery	_____	(36)
From day-old bakery outlet/thrift store	_____	(37)
From all-purpose drug store	_____	(38)
From other place.	_____	(39)

35. Which statement below best describes how frequently you throw out white bread because it has gone stale before you finish the loaf? ("X" ONE BOX.)

Every day or almost . . . . . [ ]1
Several times a week. . . . . [ ]2
About once a week . . . . . [ ]3
2-3 times a month . . . . . [ ]4
About once a month. . . . . [ ]5
Less often than once a month. . . . . [ ]6
Practically never . . . . . [ ]7 (40)

36a. When you buy more than one loaf of white bread at a time, what do you do with the loaves you won't be using immediately?

Freeze. . . . . [ ]1
Put in refrigerator . . . . . [ ]2
Put in bread box. . . . . [ ]3
Never buy more than one loaf at a time. [ ]R (41)

36b. When you take frozen white bread out of the freezer, do you take out a whole loaf at a time or do you just take out the number of slices you need?

Take out whole loaf . . . . . [ ]1
Take out number of slices needed. . . . [ ]2
Don't freeze white bread. . . . . [ ]R ——→GO TO QU. 37 (42)

36c. When you use white bread that has been frozen, do you feel the defrosted bread is.... ("X" ONE BOX.)

Just as good as fresh . . . . . [ ]1
Almost as good as fresh . . . . . [ ]2
Not as good as fresh. . . . . [ ]3
Nowhere near as good as fresh . . . . . [ ]4 (43)

*Section selling fresh bread, rolls and other bakery items which are baked daily right in the store.

(B317)(2)

37. I've listed below some statements about eating habits and food. I'd like to know how much you, personally agree or disagree with each statement.

After each statement are the numbers 1 through 6. Please circle the one number that best describes how you feel about each statement. The lower the number, the more you tend to DISAGREE with the statement. The higher the number, the more you tend to AGREE with the statement. The numbers 1 through 6 may be described as follows:

1 You definitely disagree with the statement
2 You moderately disagree with the statement
3 You slightly disagree with the statement
4 You slightly agree with the statement
5 You moderately agree with the statement
6 You definitely agree with the statement

You may think some items are similar. Actually, no two are exactly alike, so please be sure to circle one number for each statement

	Definitely Disagree					Definitely Agree	
Serving packaged snack cakes to my children makes them happy	1	2	3	4	5	6	(44)
All vitamins and minerals are chemicals	1	2	3	4	5	6	(45)
Wheat products are a good source of carbohydrates	1	2	3	4	5	6	(46)
My parents were strict about my eating habits when I was a child	1	2	3	4	5	6	(47)
I enjoy preparing the main meal of the day. It's fun and challenging	1	2	3	4	5	6	(48)
I limit my family's use of cookies	1	2	3	4	5	6	(49)
I frequently argue with the children about eating vegetables	1	2	3	4	5	6	(50)
I like to buy snacks that can be shared with others	1	2	3	4	5	6	(51)
Our children eat everything served at the meal	1	2	3	4	5	6	(52)
It's very difficult to schedule dinner for the whole family together during the week	1	2	3	4	5	6	(53)
Wheat breads don't have much whole wheat flour in them	1	2	3	4	5	6	(54)
Food higher in energy is high in calories	1	2	3	4	5	6	(55)
Our children take vitamins daily	1	2	3	4	5	6	(56)
I don't always serve my family a breakfast every day	1	2	3	4	5	6	(57)
I avoid foods that have high nitrate levels	1	2	3	4	5	6	(58)
I snack frequently	1	2	3	4	5	6	(59)
Food preparation for the main meal is a job	1	2	3	4	5	6	(60)
Most foods have something good and bad about them	1	2	3	4	5	6	(61)
More food high in carbohydrates should be eaten	1	2	3	4	5	6	(62)
I limit my family's use of crackers	1	2	3	4	5	6	(63)
Salted pretzels are a good snack for babies while teething	1	2	3	4	5	6	(64)
I associate a spaghetti dinner with happy meals	1	2	3	4	5	6	(65)
I am concerned about the nutritional value of snacks	1	2	3	4	5	6	(66)
Macaroni is a favorite dish of my children	1	2	3	4	5	6	(67)
The cost of food determines what I plan for meals	1	2	3	4	5	6	(68)
When I think of energy, I think of calories	1	2	3	4	5	6	(69)
I try to avoid desserts	1	2	3	4	5	6	(70)
I'm not as concerned about nutrition as I used to be	1	2	3	4	5	6	(71)
Raw sugar or honey is better than refined sugar	1	2	3	4	5	6	(72)
I exercise to maintain an acceptable weight level	1	2	3	4	5	6	(73)
A side dish of spaghetti or noodles is a welcome change of pace from potatoes	1	2	3	4	5	6	(74)
I consider myself healthy as long as I don't feel sick or tired	1	2	3	4	5	6	(75)
Sugar provides quick energy	1	2	3	4	5	6	(76)
Sweet snacks promote tooth decay	1	2	3	4	5	6	(77)
Enrichment of white bread is adding back some of the vitamins and minerals lost in flour processing	1	2	3	4	5	6	(78)
A meal is not complete without dessert	1	2	3	4	5	6	(79)
My children are fussy eaters	1	2	3	4	5	6	(80)
When I feel tired it isn't because I haven't been eating	1	2	3	4	5	6	(81)
Unsalted crackers are a good snack	1	2	3	4	5	6	(82)
I often skip breakfast	1	2	3	4	5	6	(83)
I frequently eat more than I should	1	2	3	4	5	6	(84)
A meal is not complete without a vegetable	1	2	3	4	5	6	(85)
Pressures and being on the run have more to do with lack of energy than what I eat	1	2	3	4	5	6	(86)
I buy white bread especially for my children	1	2	3	4	5	6	(87)
My mother and I had very few disagreements about what I ate	1	2	3	4	5	6	(88)
I frequently serve fruit for dessert	1	2	3	4	5	6	(89)
My children and I have few disagreements about what to eat	1	2	3	4	5	6	(90)
I'm confused about what I should and should not eat	1	2	3	4	5	6	(91)
My family's diet is more important than my own	1	2	3	4	5	6	(92)
There's too much talk about eating three balanced meals a day	1	2	3	4	5	6	(93)
Packaged cookies are a good snack for children	1	2	3	4	5	6	(94)
I'd rather buy fortified white bread than enriched white bread	1	2	3	4	5	6	(95)
Cold, ready-to-eat cereal and milk helps provide a good breakfast for my children	1	2	3	4	5	6	(96)
My trying to control the number of calories is a problem in preparing meals	1	2	3	4	5	6	(97)
Spaghetti served with tomato sauce is nutritious	1	2	3	4	5	6	(98)
I serve packaged snack cakes to show my children I care	1	2	3	4	5	6	(99)
I should serve my family a breakfast every day	1	2	3	4	5	6	(00)
I try to avoid foods containing animal fat	1	2	3	4	5	6	(01)
Food served in my household is determined by what is easiest to fix	1	2	3	4	5	6	(02)
Food alone never gives you all the vitamins and minerals you need to stay healthy	1	2	3	4	5	6	(03)
Fruit is a good snack for children	1	2	3	4	5	6	(04)
I treat spaghetti as just a filler	1	2	3	4	5	6	(05)
I associate desserts with happy occasions and good feeling	1	2	3	4	5	6	(06)
We serve desserts after meals, but less often than we used to	1	2	3	4	5	6	(07)
Packaged snack cakes are good snacks for children	1	2	3	4	5	6	(08)

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Please continue circling one number for each statement below to indicate how much you agree or disagree with the statement.

	Definitely Disagree					Definitely Agree	
When things are going badly for you, food is a great consolation.	1	2	3	4	5	6	(48)
I avoid foods high in starch.	1	2	3	4	5	6	(49)
Nuts are a good snack for children.	1	2	3	4	5	6	(50)
White bread is a food I associate with low income families.	1	2	3	4	5	6	(51)
My children dislike the idea of eating nutritious foods	1	2	3	4	5	6	(52)
Heavy snacking is a cause of hypertension	1	2	3	4	5	6	(53)
A person can lose weight even if he or she doesn't reduce the number of calories taken in daily	1	2	3	4	5	6	(54)
Very few people know how to plan meals to get all the vitamins and minerals they need.	1	2	3	4	5	6	(55)
I exercise to improve my physical appearance.	1	2	3	4	5	6	(56)
It's important that each meal should be balanced.	1	2	3	4	5	6	(57)
Wheat bread is a food I associate with upper income people.	1	2	3	4	5	6	(58)
Complex carbohydrates provide timed release energy.	1	2	3	4	5	6	(59)
I associate crackers with happy children.	1	2	3	4	5	6	(60)
I have a better day when I start with breakfast	1	2	3	4	5	6	(61)
Dinner is the only meal I plan with any regularity.	1	2	3	4	5	6	(62)
When I think of quick energy, I think of candy.	1	2	3	4	5	6	(63)
All natural vitamins are chemicals.	1	2	3	4	5	6	(64)
We fix meals today which are a lot simpler than what my mother made	1	2	3	4	5	6	(65)
I try to avoid spaghetti.	1	2	3	4	5	6	(66)
I am concerned with my intake of salt (sodium).	1	2	3	4	5	6	(67)
I avoid foods which are high in cholesterol	1	2	3	4	5	6	(68)
I am trying to consume more fruit and vegetables.	1	2	3	4	5	6	(69)
Natural foods are healthier than processed foods.	1	2	3	4	5	6	(70)
I am concerned about the sugar content of cookies	1	2	3	4	5	6	(71)
It's difficult to know whether my spouse eats properly away from home	1	2	3	4	5	6	(72)
Packaged cookies or snack cakes have a place in a balanced diet	1	2	3	4	5	6	(73)
Lacking energy has little to do with my eating habits	1	2	3	4	5	6	(74)
I serve simpler meals than I did a few years ago.	1	2	3	4	5	6	(75)
I can always tell when I've had enough to eat	1	2	3	4	5	6	(76)
Pre-sweetened cereals without milk are nutritious	1	2	3	4	5	6	(78-2) (79-0/80-7)
Snacking is a sure way to put on weight	1	2	3	4	5	6	(13)
I try to limit the use of salt (sodium) in our house.	1	2	3	4	5	6	(14)
Fortified white bread is better for you than enriched white bread	1	2	3	4	5	6	(15)
I like rich desserts.	1	2	3	4	5	6	(16)
There's nothing wrong with skipping meals	1	2	3	4	5	6	(17)
It's not spaghetti that's fattening, it's what you put on it.	1	2	3	4	5	6	(18)
When buying white bread, price is more important than quality	1	2	3	4	5	6	(19)
I am not concerned with my children eating packaged snack cakes	1	2	3	4	5	6	(20)
I think of white bread as a filler with the main meal	1	2	3	4	5	6	(21)
Children put salt on just about everything before even tasting.	1	2	3	4	5	6	(22)
We eat more meat than we need	1	2	3	4	5	6	(23)
My spouse often skips breakfast	1	2	3	4	5	6	(24)
My children are increasingly responsible for planning and preparing some of their own meals	1	2	3	4	5	6	(25)
Spaghetti is a food I associate with low income families.	1	2	3	4	5	6	(26)
My family eats more food than they need	1	2	3	4	5	6	(27)
It's not bread that's fattening, it's what you put on it.	1	2	3	4	5	6	(28)

38. Please "X" the persons below that you have in your household. Then, for each one, "X" the box that indicates how frequently each person eats the products listed below.

Persons in Household →	Self [ ]1	Spouse [ ]2	Male Teen [ ]3	Female Teen [ ]4	Male Child (12 & Under) [ ]5	Female Child (12 & Under) [ ]6	
38a. This person eats white bread.... ("X" ONE BOX)							(29)
Regularly	[ ]1 (30)	[ ]1 (35)	[ ]1 (40)	[ ]1 (45)	[ ]1 (50)	[ ]1 (55)	
Occasionally	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	
Seldom	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	
Never	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	
38b. This person eats spaghetti.... ("X" ONE BOX)							
Regularly	[ ]1 (31)	[ ]1 (36)	[ ]1 (41)	[ ]1 (46)	[ ]1 (51)	[ ]1 (56)	
Occasionally	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	
Seldom	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	
Never	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	
38c. This person eats packaged snack cakes.... ("X" ONE BOX)							
Regularly	[ ]1 (32)	[ ]1 (37)	[ ]1 (42)	[ ]1 (47)	[ ]1 (52)	[ ]1 (57)	
Occasionally	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	
Seldom	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	
Never	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	
38d. This person eats macaroni.... ("X" ONE BOX)							
Regularly	[ ]1 (33)	[ ]1 (38)	[ ]1 (43)	[ ]1 (48)	[ ]1 (53)	[ ]1 (58)	
Occasionally	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	
Seldom	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	
Never	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	
38e. This person eats packaged donuts with a hole in the center.... ("X" ONE BOX)							
Regularly	[ ]1 (34)	[ ]1 (39)	[ ]1 (44)	[ ]1 (49)	[ ]1 (54)	[ ]1 (59)	
Occasionally	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	
Seldom	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	
Never	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	

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(Bs17),(2)

39. People have many different health and diet concerns. Will you please look at the list below and indicate how much you are concerned these days about each item listed. For each one, please circle one of the six numbers to show how much you're concerned. The lower the number, the less you are concerned. The higher the number, the more you are concerned.

	Not At All Concerned					Extremely Concerned	
Increasing carbohydrates in my diet	1	2	3	4	5	6	(60)
Preparing low cost meals for my family	1	2	3	4	5	6	(61)
Eating too much sugar	1	2	3	4	5	6	(62)
Hyperactivity in my children	1	2	3	4	5	6	(63)
Eating foods high in starch	1	2	3	4	5	6	(64)
Eating foods with nitrates/nitrites	1	2	3	4	5	6	(65)
Eating food from fast food restaurants too frequently	1	2	3	4	5	6	(66)
Serving pre-prepared foods in place of home-cooked	1	2	3	4	5	6	(67)
Eating foods that keep you regular	1	2	3	4	5	6	(68)
Checking the nutrient content of foods before you buy them	1	2	3	4	5	6	(69)
Making sure that the food you buy in the supermarket is fresh	1	2	3	4	5	6	(70)
Eating too much meat	1	2	3	4	5	6	(71)
Eating too much fat	1	2	3	4	5	6	(72)
Getting enough rest	1	2	3	4	5	6	(73)
Serving foods that don't take too long to cook	1	2	3	4	5	6	(74)
Staying away from snacks	1	2	3	4	5	6	(75)
Sticking to a diet	1	2	3	4	5	6	(14)
Eating only natural foods	1	2	3	4	5	6	(15)
Being able to relax	1	2	3	4	5	6	(16)
Getting enough fiber in the diet	1	2	3	4	5	6	(17)
Eating three meals a day	1	2	3	4	5	6	(18)
Drinking enough milk	1	2	3	4	5	6	(19)
Drinking too much alcohol	1	2	3	4	5	6	(20)
Using too much salt (sodium)	1	2	3	4	5	6	(21)
Drinking too much coffee	1	2	3	4	5	6	(22)
Smoking too much	1	2	3	4	5	6	(23)
Eating an adequate breakfast	1	2	3	4	5	6	(24)
Eating foods high in cholesterol	1	2	3	4	5	6	(25)
Taking proper care of your teeth	1	2	3	4	5	6	(26)
Eating a balanced diet	1	2	3	4	5	6	(27)
Getting enough carbohydrates	1	2	3	4	5	6	(28)
Maintaining the right weight	1	2	3	4	5	6	(29)
Getting enough exercise	1	2	3	4	5	6	(30)

40. Please indicate the number of calories you feel are contained in each of the products listed below.

CALORIES	5 Ounce Serving Spaghetti With Tomato Sauce	Cream Filled Snack Cake	One Slice of White Bread	Medium Size Baked Potato	Medium Size Apple	Saltine Cracker	2 Ounce Candy Bar Like Snickers	One Slice of Wheat Bread	5 Ounce Serving Macaroni & Cheese	8 Ounce Glass of Whole Milk
700 and over	[ ]1 (31)	[ ]1 (33)	[ ]1 (35)	[ ]1 (37)	[ ]1 (39)	[ ]1 (41)	[ ]1 (43)	[ ]1 (45)	[ ]1 (47)	[ ]1 (49)
650 to 700	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
600 to 649	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
550 to 599	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
500 to 549	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
450 to 499	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6	[ ]6
400 to 449	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7	[ ]7
350 to 399	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]8	[ ]6	[ ]8	[ ]8
300 to 349	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9	[ ]9
250 to 299	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0	[ ]0
200 to 249	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X
150 to 199	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R	[ ]R
100 to 149	[ ]1 (32)	[ ]1 (34)	[ ]1 (36)	[ ]1 (38)	[ ]1 (40)	[ ]1 (42)	[ ]1 (44)	[ ]1 (46)	[ ]1 (48)	[ ]1 (50)
75 to 99	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2	[ ]2
50 to 74	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3	[ ]3
25 to 49	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4	[ ]4
Under 25 calories	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5	[ ]5
Don't know	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X	[ ]X

41. How much attention do you pay to the dating on bakery products? ("X" ONE BOX.)

A lot of attention [ ]1
Some attention [ ]2
No real attention [ ]3 (51)

41a. How much attention do you pay to the dating on white bread? ("X" ONE BOX.)

A lot of attention [ ]1
Some attention [ ]2
No real attention [ ]3 (52)
Don't buy white bread [ ]4 → GO TO QU. 43

41b. How often do you bother to compare the dates on two or more packages of white bread? ("X" ONE BOX.)

Very often [ ]1
Fairly often [ ]2
Very seldom [ ]3 (53)
Practically never [ ]4

42. About how often do you put back a package of white bread on the shelf because you found out from the label that it was out of date?

Very often [ ]1
Fairly often [ ]2
Very seldom [ ]3 (54)
Practically never [ ]4

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First of all, please "X" which of the persons below you have in your household. Then, for each person you "X'd," please answer all the questions on this page.

Persons in Household → [ ]1 Yourself [ ]2 Your Spouse [ ]3 Teen Boy(s) [ ]4 Teen Girl(s) (55)

43. Compared to a few years ago, do you feel that this person is more concerned about nutrition than before, less concerned, or isn't there any real difference?

	Yourself	Your Spouse	Teen Boy(s)	Teen Girl(s)
More concerned	[ ]1 (56)	[ ]1 (67)	[ ]1 (13)	[ ]1 (24)
Less concerned	[ ]2	[ ]2	[ ]2	[ ]2
No real difference	[ ]3	[ ]3	[ ]3	[ ]3
Not sure	[ ]4	[ ]4	[ ]4	[ ]4

44. Do you feel that this person eats more nutritiously than a few years ago, less nutritiously, or just about the same?

More nutritiously	[ ]1 (57)	[ ]1 (68)	[ ]1 (14)	[ ]1 (25)
Less nutritiously	[ ]2	[ ]2	[ ]2	[ ]2
Just about the same	[ ]3	[ ]3	[ ]3	[ ]3
Not sure	[ ]4	[ ]4	[ ]4	[ ]4

45. Would you say this person is well informed about nutrition in general, fairly well informed, or not that well informed?

Very well informed	[ ]1 (58)	[ ]1 (69)	[ ]1 (15)	[ ]1 (26)
Fairly well informed	[ ]2	[ ]2	[ ]2	[ ]2
Not that well informed	[ ]3	[ ]3	[ ]3	[ ]3

46. How frequently does this person engage in some form of exercise?

Every day or almost	[ ]1 (59)	[ ]1 (70)	[ ]1 (16)	[ ]1 (27)
Several times a week	[ ]2	[ ]2	[ ]2	[ ]2
About once a week	[ ]3	[ ]3	[ ]3	[ ]3
2-3 times a month	[ ]4	[ ]4	[ ]4	[ ]4
About once a month	[ ]5	[ ]5	[ ]5	[ ]5
Less often than once a month	[ ]6	[ ]6	[ ]6	[ ]6

47. Approximately how much time, on the average, is spent in physical activity each time this person participates?

Less than 1/2 hour	[ ]1 (60)	[ ]1 (71)	[ ]1 (17)	[ ]1 (28)
1/2 to 1 hour	[ ]2	[ ]2	[ ]2	[ ]2
1 to 2 hours	[ ]3	[ ]3	[ ]3	[ ]3
More than 2 hours	[ ]4	[ ]4	[ ]4	[ ]4

48. Which one of the statements below best describes this person's health?

Excellent	[ ]1 (61)	[ ]1 (72)	[ ]1 (18)	[ ]1 (29)
Very Good	[ ]2	[ ]2	[ ]2	[ ]2
Fair	[ ]3	[ ]3	[ ]3	[ ]3
Poor	[ ]4	[ ]4	[ ]4	[ ]4

49. Which one of the statements below best describes this person's weight status?

Trying to gain more than 10 pounds	[ ]1 (62)	[ ]1 (73)	[ ]1 (19)	[ ]1 (30)
Trying to gain 1 to 10 pounds	[ ]2	[ ]2	[ ]2	[ ]2
Satisfied with present weight and does not have to worry about maintaining this weight	[ ]3	[ ]3	[ ]3	[ ]3
Satisfied with present weight but does have to count calories to maintain this weight	[ ]4	[ ]4	[ ]4	[ ]4
Trying to lose 1 to 10 pounds	[ ]5	[ ]5	[ ]5	[ ]5
Trying to lose more than 10 pounds	[ ]6	[ ]6	[ ]6	[ ]6

50. Which one of these statements best describes this person's concerne about his/her diet?

Eats what he/she likes and doesn't worry about calories, nutrients, and all of the other warnings	[ ]1 (63)	[ ]1 (74)	[ ]1 (20)	[ ]1 (31)
His/her main concern is calories	[ ]2	[ ]2	[ ]2	[ ]2
He/she tries to eat a balanced diet, but doesn't make a big deal about it	[ ]3	[ ]3	[ ]3	[ ]3
He/she feels very strongly about eating only what's good for him/her	[ ]4	[ ]4	[ ]4	[ ]4

51. Is this person a member or participant in any of the following? ("X" AS MANY AS APPLY FOR EACH PERSON.)

Weight Watchers	[ ]1 (64)	[ ]1 (75)	[ ]1 (21)	[ ]1 (32)
TOPS	[ ]2	[ ]2	[ ]2	[ ]2
Health club/spa	[ ]3	[ ]3	[ ]3	[ ]3
Nutri-System	[ ]4	[ ]4	[ ]4	[ ]4
Pritikin Diet Plan	[ ]5	[ ]5	[ ]5	[ ]5
Cambridge Diet Plan	[ ]6	[ ]6	[ ]6	[ ]6
Scarsdale Diet Plan	[ ]7	[ ]7	[ ]7	[ ]7
Mr. Fit	[ ]8	[ ]8	[ ]8	[ ]8
Regional Nutrition/Health Assessment Program	[ ]9	[ ]9	[ ]9	[ ]9
Diet Center	[ ]1 (65)	[ ]1 (76)	[ ]1 (22)	[ ]1 (33)
Other diet programs	[ ]2	[ ]2	[ ]2	[ ]2
DOESN'T PARTICIPATE IN ANY	[ ]3	[ ]3	[ ]3	[ ]3

52. Which statement best describes this person's overall diet?

On a diet for medical reasons	[ ]1 (66)	[ ]1 (77)	[ ]1 (23)	[ ]1 (34)
On a diet for his/her complexion	[ ]2	[ ]2	[ ]2	[ ]2
On a diet to gain weight	[ ]3	[ ]3	[ ]3	[ ]3
On a diet to lose weight	[ ]4	[ ]4	[ ]4	[ ]4
Other (write in)_____	[ ]5	[ ]5	[ ]5	[ ]5
NOT ON ANY PARTICULAR DIET	[ ]0	[ ]0	[ ]0	[ ]0
		(78-2)	(79-0)	(80-9)

Please answer the following questions about yourself only. 12

53. How familiar are you with the guidelines published by each of the following groups? (X" ONE BOX FOR EACH GROUP.)

GROUPS	Not Heard of	Heard of: Not At All Familiar	Somewhat Familiar	Very Familiar	
Department of Agriculture (USDA)	[ ]1	[ ]2	[ ]3	[ ]4	(35)
National Football League	[ ]1	[ ]2	[ ]3	[ ]4	(36)
National Institute of Health	[ ]1	[ ]2	[ ]3	[ ]4	(37)
American Cancer Society	[ ]1	[ ]2	[ ]3	[ ]4	(38)
National Academy of Science	[ ]1	[ ]2	[ ]3	[ ]4	(39)
Weight Watchers	[ ]1	[ ]2	[ ]3	[ ]4	(40)
Nutri-System	[ ]1	[ ]2	[ ]3	[ ]4	(41)
American Heart Association	[ ]1	[ ]2	[ ]3	[ ]4	(42)
U. S. Surgeon General	[ ]1	[ ]2	[ ]3	[ ]4	(43)
Pritikin Diet	[ ]1	[ ]2	[ ]3	[ ]4	(44)
Cambridge Diet	[ ]1	[ ]2	[ ]3	[ ]4	(45)
Scarsdale Diet	[ ]1	[ ]2	[ ]3	[ ]4	(46)
Mr. Fit	[ ]1	[ ]2	[ ]3	[ ]4	(47)
Regional Nutrition/Health Assessment Program	[ ]1	[ ]2	[ ]3	[ ]4	(48)
Diet Center	[ ]1	[ ]2	[ ]3	[ ]4	(49)
American Dietetic Association	[ ]1	[ ]2	[ ]3	[ ]4	(50)
American Diabetic Association	[ ]1	[ ]2	[ ]3	[ ]4	(51)

54. In Column A below, please "X" all of the dietary guidelines which you presently have. Then, in Column B, for each guideline you "X'd," please indicate whether or not you follow this guideline.

	COL. A Have Guideline (52-53)	COL. B Follow Guideline: Yes	No	
Department of Agriculture (USDA)	[ ]1 →	[ ]1	[ ]2	(54)
National Football League	[ ]2 →	[ ]1	[ ]2	(55)
National Institute of Health	[ ]3 →	[ ]1	[ ]2	(56)
American Cancer Society	[ ]4 →	[ ]1	[ ]2	(57)
National Academy of Science	[ ]5 →	[ ]1	[ ]2	(58)
Weight Watchers	[ ]6 →	[ ]1	[ ]2	(59)
Nutri-System	[ ]7 →	[ ]1	[ ]2	(60)
American Heart Association	[ ]8 →	[ ]1	[ ]2	(61)
U. S. Surgeon General	[ ]9 →	[ ]1	[ ]2	(62)
Pritikin Diet	[ ]0 →	[ ]1	[ ]2	(63)
Cambridge Diet	[ ]X →	[ ]1	[ ]2	(64)
Scarsdale Diet	[ ]R →	[ ]1	[ ]2	(65)
Mr. Fit	[ ]-1 →	[ ]1	[ ]2	(66)
Regional Nutrition/Health Assessment Program	[ ]-2 →	[ ]1	[ ]2	(67)
Diet Center	[ ]-3 →	[ ]1	[ ]2	(68)
American Dietetic Association	[ ]-4 →	[ ]1	[ ]2	(69)
American Diabetic Association	[ ]-5 →	[ ]1	[ ]2	(70)
NONE OF THE ABOVE	[ ]-0			(76-2) (79-1) (80-2)

55. How frequently do you participate in the following activities? ("X" ONE FOR EACH ACTIVITY.)

ACTIVITIES	Every Day or Almost	Several Times a Week	About Once a Week	2-3 Times a Month	About Once a Month	Less Often Than Once a Month	Never	
Golf (in season)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(13)
Swimming (in season)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(14)
Jogging	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(15)
Walking specifically for exercise	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(16)
Bicycling	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(17)
Tennis	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(18)
Racketball/Squash	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(19)
Team Sports (e.g., Softball, Baseball, Football, etc.)	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(20)
Rope Jumping	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(21)
Aerobic Dancing	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(22)
Exercise Salon/Health Club	[ ]1	[ ]2	[ ]3	[ ]4	[ ]5	[ ]6	[ ]7	(23)

56. In this last question I'd like to know something about your smoking habits and those of your spouse (if any). Please "X" one box for yourself and one for your spouse.

	Yourself	Your Spouse	
Have never smoked	[ ]1 (24)	[ ]1 (25)	
Used to smoke but have stopped	[ ]2	[ ]2	
Currently smoke less than a pack a day	[ ]3	[ ]3	
Currently smoke about a pack a day	[ ]4	[ ]4	
Currently smoke more than a pack a day	[ ]5	[ ]5	(78-2)
NOT MARRIED		[ ]6	(79-1) (80-1)

Thank you very much for your help on this study. Please look over the questionnaire to be sure you've answered all my questions. Then, return your answers in the envelope provided.

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Special Insert Questions On Packaged Wheat-based Snack Goods

(B317) 31-34 (1)

(46-77 oper; (78-1) (79-0/80-1, 80. et DUP. 1-12 (13-21 oper.

31. Down the side below is a list of statements people have made about packaged snack cakes, individual fruit pies and donuts with a hole in the center. (Packaged snack cakes are cupcakes and chocolate covered or creme filled cakes. Packaged snack cakes and individual fruit pies are sold in individual and family size packages.) Please "X" all the statements you feel describe each product -- whether or not you use them personally.

	Packaged Snack Cakes	Packaged Donuts (With Hole)	Individual Fruit Pies
Greasy	[ ]1 (22)	[ ]1 (24)	[ ]1 (26)
Good value for the money	[ ]2	[ ]2	[ ]2
Product I trust	[ ]3	[ ]3	[ ]3
Children like them	[ ]4	[ ]4	[ ]4
Convenient	[ ]5	[ ]5	[ ]5
Made with high quality ingredients	[ ]6	[ ]6	[ ]6
Fattening	[ ]7	[ ]7	[ ]7
Poor texture	[ ]8	[ ]8	[ ]8
Not particularly good for snacking	[ ]9	[ ]9	[ ]9
Too sweet	[ ]0	[ ]0	[ ]0
Made with natural ingredients	[ ]X	[ ]X	[ ]X
Low in carbohydrates	[ ]R	[ ]R	[ ]R
High in carbohydrates	[ ]1 (23)	[ ]1 (25)	[ ]1 (27)
Low in sugar	[ ]2	[ ]2	[ ]2
High in sugar	[ ]3	[ ]3	[ ]3
Low in protein	[ ]4	[ ]4	[ ]4
High in protein	[ ]5	[ ]5	[ ]5
Provides quick energy	[ ]6	[ ]6	[ ]6
Good for breakfast	[ ]7	[ ]7	[ ]7
Particularly good for snacking	[ ]8	[ ]8	[ ]8

32. Listed below are reasons some people may have for cutting back or tending to avoid buying packaged snack cakes, packaged donuts with a hole in the center and individual fruit pies. Please "X" those statements that apply to <u>you, personally</u>.

	Packaged Snack Cakes	Packaged Donuts (With Hole)	Individual Fruit Pies
Empty calories	[ ]1 (28)	[ ]1 (29)	[ ]1 (30)
Fattening	[ ]2	[ ]2	[ ]2
Serving more fresh fruits as snacks	[ ]3	[ ]3	[ ]3
Serving more fresh vegetables as snacks	[ ]4	[ ]4	[ ]4
Too expensive	[ ]5	[ ]5	[ ]5
Ruins my children's/family's appetites	[ ]6	[ ]6	[ ]6
Liked only by children	[ ]7	[ ]7	[ ]7
Cookies are a less expensive substitute	[ ]8	[ ]8	[ ]8

Special Insert Questions On Pasta Products

(B317) 21-24 (2)

31a. For each dish listed across the top below, please "X" the statements which, in your opinion, describe that dish. ("X" AS MANY STATEMENTS AS APPLY FOR EACH DISH.)

STATEMENTS	Tuna Noodle Casserole	Macaroni Salad	Macaroni and Cheese	Spaghetti with Meat Sauce	
Nutritious	[ ]1 (67)	[ ]1 (70)	[ ]1 (73)	[ ]1 (76)	(30-35 cont.)
Fresh	[ ]2	[ ]2	[ ]2	[ ]2	
Provides quick energy	[ ]3	[ ]3	[ ]3	[ ]3	
Product I trust	[ ]4	[ ]4	[ ]4	[ ]4	
Wholesome	[ ]5	[ ]5	[ ]5	[ ]5	
Natural	[ ]6	[ ]6	[ ]6	[ ]6	
Expensive	[ ]7	[ ]7	[ ]7	[ ]7	
High in fat	[ ]8	[ ]8	[ ]8	[ ]8	
Junk food	[ ]9	[ ]9	[ ]9	[ ]9	
High in salt content	[ ]0	[ ]0	[ ]0	[ ]0	
Low in fiber	[ ]X	[ ]X	[ ]X	[ ]X	
Filling	[ ]R	[ ]R	[ ]R	[ ]R	
Liked especially by children	[ ]1 (68)	[ ]1 (71)	[ ]1 (74)	[ ]1 (77)	
Bad for you	[ ]2	[ ]2	[ ]2	[ ]2	
I enjoy eating frequently	[ ]3	[ ]3	[ ]3	[ ]3	
High in sugar	[ ]4	[ ]4	[ ]4	[ ]4	
High in cholesterol	[ ]5	[ ]5	[ ]5	[ ]5	
Little nutritional value	[ ]6	[ ]6	[ ]6	[ ]6	(78-2)
A good source of protein	[ ]7	[ ]7	[ ]7	[ ]7	(79-0,80-1)
A good source of vitamins and minerals	[ ]8	[ ]8	[ ]8	[ ]8	Cc. 6
Does not have much food value	[ ]9	[ ]9	[ ]9	[ ]9	DUP 1-22
High in carbohydrates	[ ]0	[ ]0	[ ]0	[ ]0	
Liked especially by adults	[ ]X	[ ]X	[ ]X	[ ]X	
Has few preservatives/additives	[ ]R	[ ]R	[ ]R	[ ]R	
High in calories	[ ]1 (69)	[ ]1 (72)	[ ]1 (75)	[ ]1 (13)	
Good tasting	[ ]2	[ ]2	[ ]2	[ ]2	
High in starch	[ ]3	[ ]3	[ ]3	[ ]3	
Provides roughage and fiber	[ ]4	[ ]4	[ ]4	[ ]4	
Low in carbohydrates	[ ]5	[ ]5	[ ]5	[ ]5	
Good for growing children	[ ]6	[ ]6	[ ]6	[ ]6	
Good food value for the money	[ ]7	[ ]7	[ ]7	[ ]7	
Low in cholesterol	[ ]8	[ ]8	[ ]8	[ ]8	
Part of a well-balanced diet	[ ]9	[ ]9	[ ]9	[ ]9	
Fattening	[ ]0	[ ]0	[ ]0	[ ]0	

31b. For each of the three products listed below -- spaghetti, macaroni and egg noodles -- please "X" all of the boxes that apply to the way or ways you serve them.

WAYS I SERVE	Spaghetti	Macaroni	Egg Noodles
As an ingredient in casseroles	[ ]1 (14)	[ ]1 (15)	[ ]1 (16)
Instead of potatoes	[ ]2	[ ]2	[ ]2
Instead of rice	[ ]3	[ ]3	[ ]3
As an ingredient in soup	[ ]4	[ ]4	[ ]4
As a side dish	[ ]5	[ ]5	[ ]5
As a main course	[ ]6	[ ]6	[ ]6
Hot, without sauce	[ ]7	[ ]7	[ ]7
Hot, with sauce	[ ]8	[ ]8	[ ]8
Cold, as a salad	[ ]9	[ ]9	[ ]9
Never serve	[ ]0	[ ]0	[ ]0

31c. How familiar are you with the term "fresh pasta?"

Not heard of. . . . . [ ]1
Heard of but not at all familiar. . . . [ ]2
Somewhat familiar . . . . . [ ]3
Very familiar . . . . . [ ]4 (17)

31d. Does the store where you do most of your grocery shopping have a fresh pasta section?

Yes. . . [ ]1 — No. . . [ ]2 → GO TO QU. 32 (18)

31e. How frequently do you purchase pasta from the fresh pasta section? ("X" ONE BOX.)

Once a week or more often. . . . . [ ]1
About every 2 weeks. . . . . [ ]2
About 2 to 3 times a month . . . . . [ ]3
About once a month . . . . . [ ]4
Less than once a month . . . . . [ ]5 (19)
Never purchase fresh pasta . . . . . [ ]0

32a. Do you own a pasta making machine?

Yes. . . [ ]1 — No. . . [ ]2 → GO TO QU. 33 (20)

32b. About how frequently do you make pasta with this machine? ("X" ONE BOX.)

Once a week or more often. . . . . [ ]1
About every 2 weeks. . . . . [ ]2
About 2 to 3 times a month . . . . . [ ]3 (21)
About once a month . . . . . [ ]4
Less than once a month . . . . . [ ]5

(22-30 open)

APPENDIX B: STUDY DESIGN AND SAMPLE

STUDY DESIGN AND SAMPLE

The Sample

The study was conducted via self-administered questionnaires among a national sample of consumer mail panel households, a survey facility of Market Facts. A national Consumer Mail Panel sample is weighted to U.S. Census data on four demographic characteristics* and can be considered representative of most U.S. households.

The study consisted of a random sample (3085) and a booster sub-sample of blacks (283). Men and women 18 years of age or older were interviewed, with proportionately more women (69%) than men (31%). Only one respondent per household was chosen. The average response rate was 74% from a mail-out of 4755, after allowing for non-deliverable questionnaires (63).

	Number	Percent
Net Mail-out	4692	100%
Total Returns	3477	74%

A 74% response rate is considered good for the relatively complex and long questionnaire used in the study. It suggests that the majority of respondents enjoyed answering the questions. Of the total returns, 3368 questionnaires (72%) were used in the analysis.

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*Balancing Factors

Age of Panel Member
Geography
Population Density
Household Income

NOTES

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